

BRIDGING *the GAPS to* SUCCESS



PROMISING PRACTICES for
PROMOTING TRANSFER
among LOW-INCOME and
FIRST-GENERATION STUDENTS

an IN-DEPTH STUDY of
SIX EXEMPLARY COMMUNITY
COLLEGES in TEXAS

CHANDRA TAYLOR SMITH, *Ph.D.*
and ABBY MILLER *with*
C. ADOLFO BERMEJO, *Ph.D.*

THE PELL INSTITUTE
for the Study of Opportunity in Higher Education

SUPPORTED BY TEXAS GUARANTEED
STUDENT LOAN CORPORATION (TG) THROUGH
THE PUBLIC BENEFIT GRANT PROGRAM

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The Pell Institute for the Study of Opportunity in Higher Education conducts and disseminates research and policy analysis to encourage policymakers, educators, and the public to improve educational opportunities and outcomes for low-income, first-generation students and students with disabilities. The Pell Institute is the first research institute to specifically examine the challenges affecting educational opportunity for these growing populations.

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TO: Chandra Taylor Smith, Ph.D.
Abby Miller
C. Adolfo Bermeo, Ph.D.

FROM: Raymund A. Paredes *RAP*

SUBJECT: Publication of Bridging the Gaps to Success

Thank you for sending me a pre-publication copy of this report on how community colleges in Texas are developing innovative and effective programs to increase transfer by their students to universities.

As you know, transfer from community colleges to universities is a critical component of the "*Closing the Gaps*" initiative in Texas and so it is extremely gratifying to read about the passion and commitment our community college leaders are bringing to this issue. Your accounts of faculty who volunteer to tutor students (beyond their teaching assignments), counselors who develop innovative orientation programs for first generation students, and presidents and deans who meet regularly with their students to promote academic success are inspiring to all educators.

I urge all community college administrators, faculty and staff to read this excellent report and to adopt the best practices it identifies. Your report demonstrates, once again, that students from all backgrounds can achieve lofty educational goals with effective teaching, counseling and mentoring in a student-centered academic environment.

Congratulations to you for this report and congratulations to all the extraordinary educators whose work you cite.

FOREWORD

This study comes as record numbers of students across the country, many of them unemployed or underemployed, enroll in community colleges in order to retool themselves for a shrunk job market and a rapidly changing economy. Preparing students for the workforce has always been a central part of the community college mission, especially during difficult economic times. And so it is today.

That said, we must not lose sight of the community college's academic mission and its role in preparing students for transfer to the university. This is especially important when we place that academic mission and transfer function in the context of the community college's role as the entry point to postsecondary education for low-income and first-generation college students of all races, including those from historically underrepresented populations. The community college has been, and continues to be, the open door to a better life for students from each of these populations.

They enroll in the community college, often with dreams of transfer, but the reality is that many, if not most, will place into developmental education courses from which they will never advance. And so, after a few semesters, they will drop out and not return. The challenge, then, for community colleges—in Texas and throughout the country—is not in enrolling students from these populations but in retaining them, graduating them, and transferring them to the university.

Thus, this study of six Texas community colleges with demonstrated success at transferring low-income and first-generation college students – many of them African American and Latino—is particularly relevant for anyone interested in and committed to access and opportunity. Conducted by the Pell Institute and funded by Texas Guaranteed (TG), it looks at what has worked in increasing transfer rates for low-income and first-generation students at each of these six institutions, gleans from them a set of best practices common to each of the schools, and then makes specific recommendations for replicating these practices at other community colleges, both in Texas and throughout the nation.

For Texas, which enrolls over 600,000 students in 67 community colleges, the study provides a path by which to advance the goals set in *Closing the Gaps*. That state-funded initiative aims to increase the number of low-income, first-generation, and historically underrepresented students enrolling in postsecondary education, transferring from two-year institutions, and graduating from four-year colleges and universities. For community colleges in other states, many of which do not have such a plan, it provides a blueprint for action.

This study makes clear that increasing transfer rates will require a comprehensive, multi-faceted effort. It emphasizes the need for a strong, culturally-sensitive leadership committed to involving all segments of the campus community in a data-driven discussion of current practice and, based on an analysis of what does and doesn't work, the development of an action plan to foster a student-centered transfer culture and improve transfer rates for all students. While each of the six campuses implemented a series of different strategies that fit their individual campus and their local community, all shared a belief in the potential of their students and a commitment to engaging, retaining, graduating, and transferring them. And that, it seems, is central to meeting the challenge of providing access, not to a revolving door, but to a door that opens to the university.

The question, then, is how do we develop a campus culture that focuses on students' capacity and believes in and builds on their potential? How do we develop a campus culture that welcomes all students, communicates confidence in their abilities, and engages them in the campus and its academic life?

(continued)

III





My own experience in both the community college system and the University of California taught me the importance of what the authors have described as a culturally-sensitive leadership, faculty, and staff. For me this means recognizing who students are, what their lives are about, what they bring to their education, and understanding and giving credence to their goals and dreams. Furthermore, a campus culture that establishes high academic standards, sets high academic expectations, and provides high levels of academic and personal support will result in higher student performance, higher student retention and graduation rates, and, as is the case at each of the six community colleges discussed in this study, higher transfer rates.

The findings of the study underscore our belief that higher transfer rates, particularly for low-income and first-generation college students, many of whom come from historically underrepresented populations, can become reality. But to accomplish this, as this study repeatedly points out, will require a culturally-sensitive and committed leadership, faculty, and staff that together recognize the importance of opening doors to the university – not only for their students and their families and communities, but for our society and our country.

—C. Adolfo Bermeo,
Senior Scholar, The Pell Institute



ACKNOWLEDGEMENTS

This report was written by Abby Miller, Project Manager and Research Analyst, and Chandra Taylor Smith, Director of the Pell Institute. We wish to extend our appreciation to everyone who participated in this project. The research, analyses and final presentation of this report were the efforts of many individuals. We would like to acknowledge the following persons for their various contributions:

- » *Adolfo Bermeo, Senior Scholar at the Pell Institute, who worked closely with us to edit the report, and contributed his understanding of the community college system, the transfer process, and low income and first-generation college students.*
- » *Victor Borden, Associate Vice President, University Planning, Institutional Research and Accountability, and Ty M. Cruce, Senior Policy Analyst, University Planning, Institutional Research, and Accountability at Indiana University, for conducting the quantitative analysis.*
- » *Lana Muraskin, Senior Scholar, Alberto Cabrera, Advisory Board member, and Ryan Davis, Research Analyst at the Pell Institute who provided editing assistance for the report.*
- » *Marjorie Dorime and Leah Beasley, Pell Institute interns, for providing research assistance.*
- » *Jodi Koehn-Pike, Director of Publications, Council for the Opportunity in Education, who provided assistance with the final publication.*

We would like to extend a special acknowledgement to the community college leaders who participated in this study, for opening their campuses and sharing information with us about their strategies for success. All campus representatives, from the president to administrators, faculty support staff, and especially students, provided a warm welcome and coordinated their schedules to make time to meet with us. Their participation was invaluable in our efforts to better understand the programs, policies, and people behind the numbers.

None of the efforts would have been realized in the production of this report if it were not for the generous funding and research support from TG. We also extend a hearty thank you to the Texas Association of Community Colleges and the Texas Higher Education Coordinating Board for their partnerships.

Finally, we would like to acknowledge Jennifer Engle, former Senior Analyst, The Pell Institute, for originally conceiving of this study. We also recognize that responsibility for the content of this report, including any errors or omissions, lies solely with the authors.





EXECUTIVE SUMMARY

BACKGROUND

The confluence of several factors makes this a critical time to identify promising practices for successfully transferring low-income and first-generation college students from two-year to four-year institutions. The Obama administration's goal that all Americans complete high school and at least one year of postsecondary education has placed community colleges at the forefront of the policy agenda in higher education. In this time of economic crisis, recession, and major job cuts throughout the economy, students across generations are flocking to community colleges to be re-tooled for the workplace in record numbers. Thus, as our country adapts to the economy of the 21st Century, there is more than ever a vital, practical need for community colleges to prepare, retain, and transfer their students to four-year institutions – whether or not the students' initial goals or ultimate decisions are to transfer.

This study asks the question: what are the promising practices for transferring students from two-year to four-year institutions? To answer this question, the Pell Institute for the Study of Opportunity in Higher Education, with generous funding from TG, conducted a study to examine the institutional characteristics, practices, and policies that might contribute to assuring that students matriculate and excel in community college and transfer to four-year institutions. We focused on six Texas community colleges that had higher than predicted transfer rates of low-socioeconomic status (SES) students. Given the higher than expected transfer rates exhibited at these schools, we assumed that these institutions were successfully preparing their students, academically and socially, for completing a degree at a four-year institution. In this report we discuss their strategies for success. It is our hope that the lessons learned from these six outstanding community colleges would assist others in considering promising practices that may increase their transfer rates, particularly for low-income and first-generation students.

METHODOLOGICAL APPROACH

This study utilized mixed methods to answer the questions: 1) Which community colleges in Texas have higher than expected transfer rates and serve large shares of low-income and first-generation students? And 2) What policies and practices are common among Texas community colleges with large shares of low-SES students and higher persistence, transfer, and graduation rates relative to other Texas institutions? In addition, what promising practices aimed at academic success or transfer occur at individual institutions and may contribute to their success?

The first stage of the study consisted of a quantitative model that focused on identifying successful Texas community colleges. We conducted a series of linear regression analyses to identify institutions that achieved “higher than expected” rates of transfer and graduation, based on institutional and student characteristics. Both state-level data obtained from the Higher Education Data System of the Texas Higher Education Coordinating Board (THECB), and national data available through the U.S. Department of Education and the U.S. Census Bureau were used in the analysis of 67 community colleges in the state.

The predictive model allowed us to identify institutions with higher than predicted performance rates, which were then contextualized for low-income, first-generation students using an SES scale. The SES scale was developed using both an indicator for the county in which the school is located (derived from the U.S. Census Bureau), as well as the percent of the student population deemed to be economically disadvantaged (as reported to the Texas Higher Education Coordinating Board).

In the qualitative stage of the study we conducted site visits to six high-performing schools. We selected six institutions to visit based on the following criteria: 1) their overall performance rate; 2) the difference between actual and expected transfer rates of low-income students; 3) the college's SES level 4) the diversity of student, campus, and geographic characteristics and 5) the college's permission to conduct the site visit and the feasibility of scheduling that visit in a timely manner.



We then conducted two-day site visits consisting of interviews and focus groups with students, program directors, faculty, staff, and administrators at each of the six colleges, focusing our questions on policies and programs in place that affect transfer performance. Based on the information collected through our interviews and focus groups, we conducted a systematic qualitative analysis to identify potentially successful strategies for transferring low-income, first-generation students to four-year colleges and universities.

2 KEY FINDINGS: THREE COMMON CAMPUS CHARACTERISTICS

Our analysis identified three common themes or characteristics, each consisting of institutional programs and policies that appear to contribute to higher than expected transfer rates. We call these three characteristics:

1. *A Structured Academic Pathway;*
2. *A Student-centered Culture; and*
3. *A Culturally-sensitive Leadership.*

All of the colleges in this study cultivate a culture of transfer. They ensure that their students are well-informed about the transfer process and supported, both academically and socially. These three characteristics and their individual components are described below. It should be noted that although other community colleges may have already implemented specific strategies identified in this report, the campuses we visited incorporate each program or policy as part of a holistic approach to engaging and retaining students while encouraging them to transfer to four-year institutions.

1. STRUCTURED ACADEMIC PATHWAY

While the colleges offer a range of academic, vocational, and workforce programs, each campus maintains high expectations about their students' ability to transfer. The presidents we met with emphasized the academic mission of their institutions and the importance of academic rigor as an essential component of the transfer pipeline. Each has infused the notion and importance of transfer into their campus culture, and thus they work with all students to develop realistic four-year degree plans regardless of whether or not they initially aspire to transfer upon enrolling in college.

Successful elements of a Structured Academic Pathway include:

» INSTITUTIONAL ARTICULATION AGREEMENTS

The colleges actively pursue relationships with four-year institutions, working to build a seamless transition through the educational pipeline. This helps get students on track not only for transfer to a four-year institution but also within a specific subject area. The colleges develop individually tailored degree plans that students can continually consult in order to make sure they are taking the coursework they need to transfer to their Bachelor's degree program of interest. In addition, they invite partnering universities to assign outreach and admissions staff and often provide dedicated space to house these representatives on campus. In this way, students can easily and accessibly obtain information about transferability of credits directly from the receiving institution without leaving the community college campus. Regular contact with university representatives also helps to demystify and humanize the university for first-generation college students who do not have a college-going background.

» DUAL ENROLLMENT

In a state where graduating from high school with college credit is emphasized, each of the six colleges we visited excels at offering such programs to students in their districts. Dual enrollment programs expose high school students to college coursework and introduce them to the college environment. That early exposure can be critical in ensuring a successful transition to college, particularly for low-income and first-generation students who are unfamiliar with higher education and what it will take to earn a baccalaureate degree. Many of the community colleges developed partnerships with the school districts in order to make dual credit more feasible for low-income students. Some institutions cover students' tuition and fees and provide transportation for students without the means of reaching campus. Students can thus enter college already having accumulated twelve transferrable core credit units, which positions them at an advantage in the transfer pipeline.

» DEVELOPMENTAL COURSEWORK INITIATIVES

Each of the colleges we visited uses innovative practices in their developmental education curriculum. They continuously examine, redesign, and improve their course offerings, all with the goal of moving students through the developmental education process quickly and preparing them for success in their transfer curriculum. They are particularly concerned with making the format, structure, and content of developmental coursework more accessible and effective. For instance, a number of the colleges break down developmental courses into tailored, manageable modules based on skills assessments. Some build in required, targeted academic support such as lab work or one-on-one faculty tutoring. The colleges are also integrating developmental skills into non-developmental coursework and programs. These innovative practices help to increase the number of students enrolling in and completing a transfer-bound curriculum.

» ACTIVE LEARNING

The colleges we visited are shifting their focus from traditional lectures to active group learning methods. For example, at several institutions faculty infuse practical hands-on research activities drawn from “real-world” scenarios into the curriculum. Their emphasis is on teaching students how to learn, and equipping students with critical thinking and analysis skills, rather than simply preparing students to pass an exam. The belief that these skills strengthen students’ academic preparation for and personal motivation to excel at four-year college coursework is firmly rooted among the senior administrators and faculty we interviewed.

2. STUDENT-CENTERED CULTURE

Each of the institutions has developed a student-centered culture, emphasizing personal attention, ease of service, convenience, collaboration, and innovation. All their outreach and support programs including TRIO Student Support Services, tutoring and advising operate on flexible schedules designed to meet the needs of both day and evening students. A culture of change, access, and availability permeates all of the campuses we visited. Each is constantly innovating and developing new ideas and programs, such as volunteer faculty tutoring, learning communities, mentoring, and summer bridge programs. They are not afraid of trying new ideas and approaches.

Essential elements of a Student-Centered Culture include:

» CUSTOMER SERVICE FOCUS

Staff and faculty work collaboratively across departments and programs, often taking on multiple roles to encourage transfer. Each of the six colleges we visited evidenced a close-knit campus culture in which staff, faculty, and students know each other by name. It is not uncommon for staff and faculty to have been at a college for 30 years or longer. A student-centered focus is engrained throughout the campus, and one-stop shops make services more user-friendly.

» TRIO STUDENT SUPPORT SERVICES (SSS)

SSS programs are recognized and repeatedly cited by the campus leadership as a major factor in the institutions’ successful transfer rates. In fact, the colleges often model campus-wide programs and services based on components of SSS. SSS targets low-income, first-generation students with tutoring, supplemental instruction, study skills workshops, and campus visits to universities. In addition, SSS provides an academic community, or “home base,” for students to study, socialize, and begin to feel a part of the campus community.

» SPECIALIZED ADVISING

Professional advisors, faculty members, support program counselors, and staff help students to think about and adopt long-term strategies regarding their academic goals. In addition, they ensure their students are aware of financial planning, financial aid availability, and college application procedures, requirements, and deadlines. Several of the colleges have transfer centers and full-time transfer coordinators, who regularly schedule representatives from partnering universities to provide students with transfer-specific information. Early alert programs are particularly important in monitoring student attendance and performance, and in identifying the many competing factors and responsibilities that could inhibit academic performance and transfer.

» LEARNING CENTERS/ TUTORING LABS

Each of the colleges provides critical academic support to all students through both general tutoring labs and subject-specific learning centers, where students receive professional and peer tutoring, computer-assisted instruction, and test preparation workshops. The Tutorial Labs and Learning Centers are frequently-used by students and receive strong support and recognition from senior administrators and faculty. The comprehensive offerings in these tutoring centers provide low-income, first-generation students with the academic and social support they need to transfer to four-year colleges.

» FLEXIBLE SCHEDULING

The colleges offer coursework and academic support in the evenings, and, at some campuses, on weekends. Such flexibility recognizes the fact that the students they serve juggle multiple responsibilities, ranging from work to family demands. This sensitivity to their needs provides students with the feasibility to complete their coursework and transfer to a four-year institution.

» FIRST-YEAR SEMINAR

In some cases, the colleges hold first-year orientation seminars that go beyond typical campus tours. They provide essential skills for college, such as note-taking, study techniques, test-taking, and navigating campus services. These are critical skills that can prepare students to be successful in community college coursework, and transfer-ready for the four-year campus.

» LEARNING COMMUNITIES

Several campuses have developed programs through which students enroll as a cohort in a structured curriculum and engage in both academic and social activities. Students forge nurturing and sustaining communities that foster a transfer mindset through integration into the campus community, successful completion of a transfer curriculum, and transfer to a university. Honors programs, while limited to students who meet minimum GPA requirements, are models of such cohort-based programs that can be replicated for specific populations of students.

» STUDENT ENGAGEMENT IN CAMPUS LIFE

Although traditionally thought of as commuter colleges that do not offer many co-curricular experiences, all of the colleges we visited engage students in active clubs and organizations. Activities often require a minimum GPA in order to participate, which encourages participation without detracting from study time. Many colleges set aside an hour of free time each day when no classes are scheduled to further encourage participation. Student engagement on campus is seen as critical to student persistence, graduation, and transfer success.

3. CULTURALLY-SENSITIVE LEADERSHIP

The presidents we interviewed with displayed strong leadership, energy and dedication to their institutions and students. Many come from similar social, economic, and/or racial/ethnic backgrounds as their students. Their own personal experiences allow them to understand their students' lives, which helps shape their insights and expertise. This common background helps foster a campus culture and environment that encourages students to take ownership of their academic experience, to participate as active citizens of the institution, and to use their education to improve their individual lives and those of their families and communities.

Some essential elements of Culturally-Sensitive Leadership include:

» STAFF AND FACULTY ROLE MODELING

Like the presidents, staff and faculty reflected on how much their students' lives mirror their own backgrounds. Many faculty and staff came from low-income families in the same surrounding towns and neighborhoods from which they draw their students. And many, like their students, were the first in their families to go to college. In several instances, staff and faculty owed their success to college personnel who reached out to them as students, and in turn they want to replicate that mentorship role by encouraging students to excel beyond the two-year campus. The campuses we visited recognize the importance of having faculty and staff that understand their student body. All are deliberately and strategically hiring staff and faculty with similar socioeconomic and ethnic backgrounds as their student body.

» STRATEGIC PLANNING

The colleges use data to gain a better insight into the social and economic contexts that encourage or hinder students' success in transfer. These insights are translated into campus-wide initiatives such as Quality Enhancement Plans that take identified factors into consideration when implementing new programs. This movement is being partly driven by Texas' statewide Closing the Gaps plan, which requires institutions to identify and close gaps in student success rates by 2015.

» OUTREACH

Each of the colleges emphasized the importance of community outreach. Through partnerships and co-sponsored events with school districts and local organizations, campuses inform parents and students about financial aid and scholarship guidelines and deadlines, college programs, courses, services, and transfer opportunities. Moreover, these community colleges see themselves as a part of the fabric of the surrounding regions. Particularly given the close-knit nature of rural areas and small towns, college personnel share a common understanding and appreciation of the local culture with members of their communities. This helps drive the messages behind outreach efforts that emphasize students' potential for academic success.

RECOMMENDATIONS

In order to implement the various promising practices we have described, we recommend that community colleges consider developing and implementing the following practices and strategies:

COLLABORATIVE CAMPUS PROGRAMMING

Each of the campuses has a strategic process to move students through a road map of transfer-preparatory coursework coupled with academic and social support systems. Rather than simply relying on dedicated individuals, the strategic process instills a culture that requires all stakeholders on the campus to collaborate and actively participate through instruction and support.

ADMINISTRATIVE OFFICES AS SUPPORT AND SERVICE CENTERS

Irrespective of the role and title of the personnel we interviewed, when we walked into an office, we were immediately made to feel at home. Staff and faculty always assured us that if they did not have the information we needed, they would find the person who did. This collaborative culture is indicative of the practice they extend to students daily, through the accessibility of transfer-specific information. The administrative staff is committed to assuring students that they are there for their welfare and not vice versa.

DATA-DRIVEN DECISION MAKING

One of the first steps in such strategic planning is to identify the challenges that specific students face in transfer. As the colleges collect data on students, it makes a difference how those data are used to inform decisions, establish budgetary priorities, and educate the campus community. The strategic analysis of data, which identified what kind of support their students needed at various stages in the academic pathway, helped inform the decisions that played a role in the success of the campuses we visited.

FACULTY ENGAGEMENT IN THE TRANSFER PROCESS

Faculty must be an integral part of developing a transfer culture. Their role in rethinking and redesigning both developmental and transfer-bound curricula is central to developing a transfer culture and increasing transfer rates. Their engagement in the transfer process can be further fostered through the cooperation and collaboration of the academic leadership, faculty, program directors, and support staff on campus.

REWARDING PEOPLE WHO VALUE STUDENTS

Inevitably, the people who interface with students daily are the ones who influence their decisions to transfer the most. This includes not only faculty and counselors but also administrators and staff. All members of the campus community need to send the clear and consistent message that they believe in the students' potential for transfer. This is a particularly important message for low-income and first-generation college students for whom college has not always been a given. This belief in the value, capacity, and potential of students begins with an investment in staff and faculty, both formally and informally. Staff are seen as critical in helping their students achieve and are rewarded for instilling a belief in their students. Those who are on the campus to simply fulfill a job do not thrive at these campuses.

PERFORMANCE AND ACCOUNTABILITY CULTURE

An important finding was that the campuses we visited were not surprised they had been selected for us to visit. Individuals at the institutions were aware that there was a culture of transfer at their college. All of them are willing to be innovative and take risks. They do not shy away from doing whatever it takes to ensure that their students succeed in achieving their dreams of completing a college degree. Given their cultures of performance and accountability, only those efforts that work and produce the verifiable outcomes will be implemented and supported.

In conclusion, each of the campuses we visited developed programs and policies that provide students with a clear structure and pathways for transfer. They structure their academic and social support services to make certain their students are transfer-ready. By using these recommendations as a guiding framework to adopt aspects of the practices we identified, institutions will have a means to make transfer a reality for their low-income, first-generation students.

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STUDY DESIGN

The purpose of this study was to identify promising practices for transferring low-income, first-generation students from Texas community colleges to four-year institutions. To accomplish this, we employed a mixed-method study, consisting of a quantitative analysis in the first stage and a qualitative study in the second stage. In the quantitative analysis, we identified Texas community colleges that performed “better than expected” in transferring low-income, first-generation college students to four-year institutions. We analyzed actual versus predicted performance measures, based on institutional and student characteristics.

Institutions that were identified as having higher than expected performance rates and large shares of low-SES students were invited to participate in the qualitative portion of the study. In-depth site visits explored the programs, practices, and policies that most effectively prepare low-income and first-generation students for transfer. Staff from the Pell Institute visited a diverse mix of six community colleges, during which we conducted individual interviews as well as focus groups with students, program directors, faculty, staff, and administrators. We then analyzed qualitative data to identify promising practices that are likely to contribute to higher than expected two-to-four-year transfer rates of low-income, first-generation students.

QUANTITATIVE METHOD

In order to identify two-year, public institutions in Texas with higher than expected transfer rates of low-income and first-generation college students to four-year institutions, Drs. Victor Borden, and Ty M. Cruce, Indiana University, performed a series of linear regression analyses for The Pell Institute. Both state-level and national analyses were performed; however, only the state-level analysis included a directly relevant measure – an overall senior institution transfer rate – and thus was included for consideration in site visit selection.

The general approach of the state-level analysis was to develop a set of regression models that would best estimate transfer rates and related outcomes, and then examine the residuals – that is, the difference between actual and predicted performance, in light of the socioeconomic profile of each campus. State-level data obtained from the Texas Higher Education Coordinating Board, supplemented by U.S. Census Bureau data, were used to predict overall performance and transfer rates among 67 public, two-year college campuses in Texas.

This analysis—and the method employed— was predictive and not explanatory. The purpose was to identify institutions that perform better than expected in transferring and graduating their students, given their institutional and student characteristics, rather than to identify institutional characteristics associated with high transfer rates. As such, we set out to answer the following: Given a set of institutional, student, and environmental factors that best predict our outcomes, which institutions perform better than expected?¹

The regression model took into account: 1) Enrollment characteristics such as headcount, percent enrollment in academic programs, percent full-time enrollment, percent Pell recipients, and percent in-district students; 2) Student profile characteristics such as percent over age 25, percent underrepresented minority, percent international, percent female, FTE student to faculty ratio, and special population percentages including economically disadvantaged, disabilities, limited English proficiency, and single parents; and 3) County demographics such as percent of adults by highest education level, percent of population in poverty, unemployment rate, percent underrepresented minority, and percent free/reduced price lunch (Please see Appendix A for additional details about the variables included in the model).

¹ With the goal of obtaining the best predictive accuracy (R-square) possible given the availability and limitations of the data, we used a stepwise regression model beginning with a large set of variables that were deemed possible predictors given their correlations with our outcomes of interest. The stepwise procedure introduces each variable to the model and results in a final model with a much smaller subset of predictor variables based on the criterion that remaining variables must be statistically significant. Thus, institutional and student characteristics were included in the model in order to find the best fitting regression line, rather than to explain their relationship with the outcomes.



TABLE 1. Calculated performance measure, actual versus predicted transfer rates and SES level of selected institutions.

INSTITUTION	PERFORMANCE MEASURE	TRANSFER OUT RATE			SES LEVEL
		ACTUAL	PREDICTED	DIFFERENCE	
TCCD Southeast Campus	16.13	24.70	12.30	12.40	High
Trinity Valley Community College	11.61	17.30	11.30	6.00	Low
Northeast Texas Community College	11.46	21.40	12.30	9.10	Low
Laredo Community College	8.92	22.50	14.30	8.20	Low
Victoria College	8.35	18.50	15.30	3.20	Low
Southwest Texas Junior College	7.08	20.00	17.30	2.70	Low

Table 1 displays the calculated performance measure, actual versus predicted transfer rates and SES level of institutions selected for site visits. All of the institutions visited score very highly on the performance measure, which ranges

The outcome of most interest in this analysis was transfer to four-year institutions. However, the following related outcomes were used as part of a convergent methodology and factored into an overall performance measure: 1) The rate of transfer to four-year institutions; 2) Six-year graduation rates; and 3) The ratio of associate's degrees to degree-seeking enrollments. These measures were chosen to give the most significant weight to transfer rates, the most direct measure of interest, but to also allow results of the other two measures to have some influence without overpowering the model.

The model resulted in a set of institutions that performed better than they were expected to, given their student and institutional characteristics. Borden and Cruce then contextualized the results by highlighting the best-performing institutions among those serving the highest proportions of students from low socioeconomic backgrounds. Socioeconomic status (SES) was the best available proxy for low-income and first-generation status, as it takes into account the incomes, occupations and education levels of parents. Institutions were classified as either "low" or "high" SES based on an SES scale developed using both an indicator for the county in which the school is located (derived from the U.S. Census Bureau), as well as the percent of the student population deemed to be economically disadvantaged (as reported to the Texas Higher Education Coordinating Board).

The institutions that emerged from the results of the regression analysis and for consideration of site visit selection are not necessarily the "best" institutions in the state. However, they are performing at higher than expected rates given their institutional and student characteristics. Thus, we can assume that the institutional "input" in terms of active efforts to transfer low-income, first-generation students is contributing to their success. Our interest was to learn more about what these institutions are doing behind the numbers that can serve as promising practices.

from -18.47 to 16.13 among the 67 institutions included in this analysis. The institutions visited also had actual transfer rates that were much higher than those predicted, with a possible difference ranging from -46.10 to 19.60 among all the institutions included in this analysis. We chose to include one high-SES institution in order to add to the diversity of campuses visited, and due to its high performance measure. The indicators displayed here were factored into site visit selection, along geographic diversity of campuses, student characteristics, and scheduling feasibility (see "Qualitative Method").

QUALITATIVE METHOD

In the qualitative stage of the study we conducted site visits to six community colleges with higher than predicted transfer rates. We selected institutions to visit based on: 1) their overall performance rate; 2) the difference between actual and expected transfer rates of low-income students; 3) the college's SES level 4) the diversity of student, campus and geographic characteristics and 5) the college's permission to conduct the site visit and the feasibility of scheduling that visit in a timely manner. We visited five high-performing low-SES institutions, as well as one high-performing high-SES institution.

We informed each institution that they were performing better than expected in terms of preparing and transferring low-income and first-generation college students, but we did not share the names of the other selected institutions participating in the site visits. We maintained this confidentiality throughout our site visits to encourage candid, non-competitive responses from individuals with whom we met.

We conducted two-day visits at each of the colleges that provided us the opportunity to visit their campuses. These site visits consisted of interviews and focus groups with administrators, faculty, staff, current students, and former students who had already transferred to four-year institutions. We met with presidents, senior administra-

tors responsible for transfer policies, recruitment and admissions, financial aid, support programs, deans, department chairs, and faculty in developmental education and in core courses that enroll large numbers of transfer students. We requested to meet with approximately 10-12 current and former students who were primarily low-income and/or first-generation, and who represented a diverse mix of characteristics such as race/ethnicity, age, academic program, and number of credit hours accrued.

Separate interview protocols were developed for staff and faculty, and students. The staff and faculty protocol opened with general questions about the institution's success and challenges, followed by questions drawing on the literature about what works in student transfer, specific to distinct disciplines and functional areas on campus. For example, we asked individuals in counseling and advising about information and services provided to their students specific to transfer. The student interview guide consisted of questions drawing on their experiences as either current or former students who had already transferred, about their transfer goals and aspirations, and about aspects of their academic preparation, guidance and counseling. (The interview protocols can be found in Appendices B and C.)

The community college campuses we visited represent a diverse mix of locations, programs and student characteristics. The campuses cover a large area of the state of Texas, with two being in rural areas, two in small towns, one in the suburb of a major metropolitan area, and one along the Mexican border with a large population of immigrant students. All but one of the campuses have a TRIO program, and one college is a participant in the Lumina Foundation's Achieving the Dream initiative. While all institutions visited have formal articulation agreements in place, the nature of those partnerships vary. One institution offers bachelor's degrees on its campus, and most offer dual credit arrangements to high school students.

Upon completion of the site visits and analysis of the data collected, we received permission from each of the six campuses we visited to reveal their institutions' names. The following are the six community colleges visited:

Laredo Community College	LCC
Northeast Texas Community College	NTCC
Southwest Texas Junior College	SWTJC
Trinity Valley Community College	TVCC
Tarrant County College – Southeast Campus	TCCSE
Victoria College	VC

INSTITUTIONAL PROFILES

Prior to each site visit, we developed institutional profiles drawing on data from our quantitative report, from the Department of Education Integrated Postsecondary Education Database System (IPEDS), and from each institution's website. We included background information about each institution's mission, tuition, student demographics, performance measures, academic offerings, and support programs (see Appendix C for a summary matrix of the institution profiles).

Key information from the institutional profiles can be found below. The institutions we visited range in size from just over 1,000 to over 12,000 students, in terms of 2007 Fall enrollment (see Chart 1).

The institutions are diverse in terms of racial/ethnic characteristics. Nearly all students at LCC are Hispanic, as are 79 percent of students at SWTJC. Although only 16 percent of students from TVCC are racial/ethnic minorities, 9 percent of these are African American. Only TCCSE has a higher percentage of African American students, with 21 percent. TCCSE is the third most diverse campus, where nearly half (49 percent) of all students are minorities (see Charts 2-4).

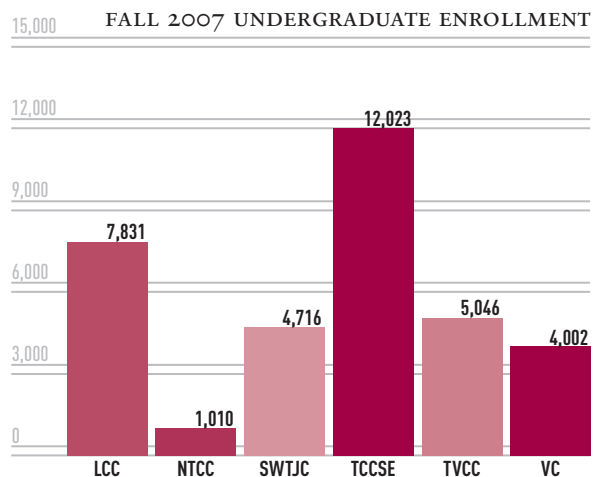


CHART 1. FALL 2007 ENROLLMENT of PARTICIPATING INSTITUTIONS

Source: National Center for Education Statistics, IPEDS Fall 2008 Enrollment Survey

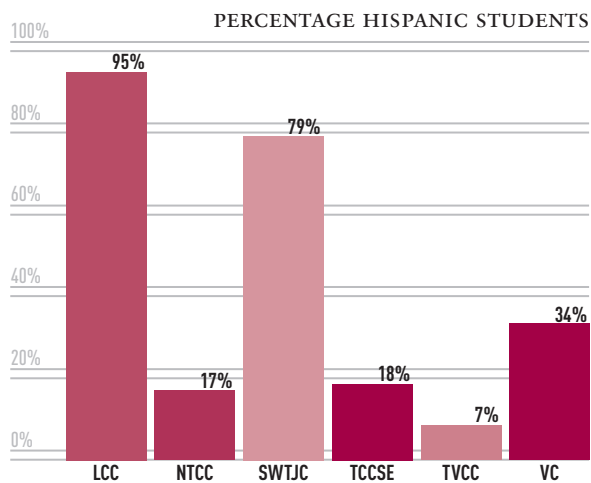
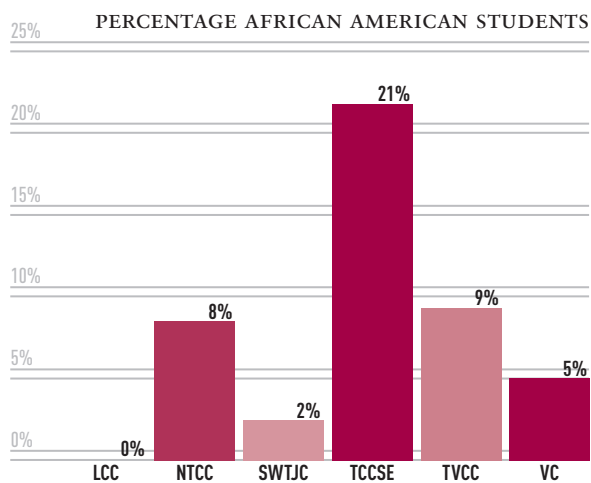
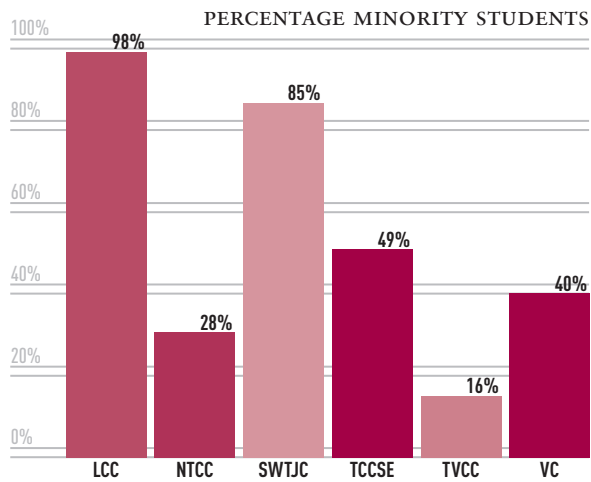


CHART 2-4. RACE and ETHNICITY of STUDENTS at PARTICIPATING INSTITUTIONS

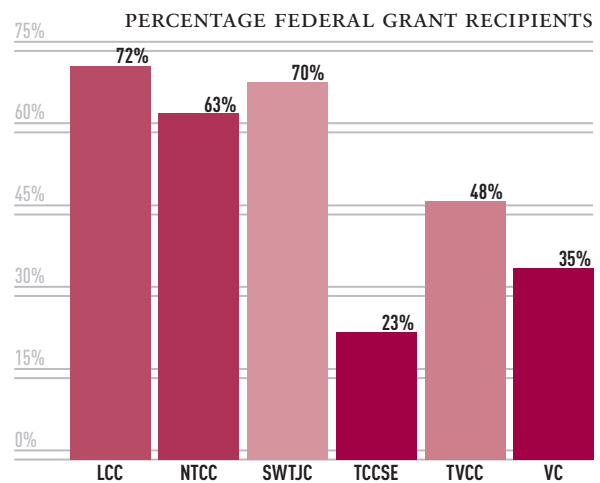


CHART 5. FEDERAL GRANT RECIPIENTS at PARTICIPATING INSTITUTIONS

The majority of students at three institutions receive federal Pell grants. TCCSE, the one institution visited from the high-SES group, has the lowest percentage of federal grant recipients (23 percent). Within the low-SES group, however, there is a range of between 35 – 72 percent of students receiving Pell grants.

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Note: Only African American and Hispanic are reported separately, because other minorities represent less than 2 percent of the total population at each campus.

Source: National Center for Education Statistics, IPEDS Fall 2008 Enrollment Survey.

TRANSFER STUDENTS, BARRIERS, & EFFECTIVE PRACTICES

a REVIEW of the RESEARCH

Community colleges

are public two-year institutions that prepare a growing and diverse student body for transfer to universities and entry into or advancement in the workforce. They currently enroll over 10 million students annually and represent more than 40 percent of the nation's undergraduate population (Bell, 2006; Cochrane & Shireman, 2008). They attract high proportions of minority, low-income, and first-generation college students in comparison to four-year institutions (Bradburn, Hurst, & Peng, 2001; Dougherty & Kienzl, 2006; Hagedorn, 2008). In addition, many community college students do not enroll immediately after completing high school. In 1995-1996, 26 percent of first time students were over 24 years of age (Dougherty & Kienzl, 2006).

Community colleges have a broad mission with multiple functions, courses, and programs, including vocational training and certificate programs, associate degrees, and transfer courses and programs. One of the central purposes of community colleges has been to prepare students for transfer to four-year institutions (Bradburn, Hurst, & Peng, 2001; Cochrane & Shireman, 2008; Dougherty & Kienzl, 2006; Hagedorn, 2008). However, though the majority (70 percent) of community college students have expectations of obtaining a bachelor's degree or higher, the reality is that few community college students actually achieve this goal (Bradburn, Hurst, & Peng, 2001). In fact, approximately half of community college students drop out before receiving a credential, and far fewer transfer (Geckeler, Beach, Pih, & Yan, 2008).

Although community colleges offer a diverse group of individuals the opportunity to enter higher education, there are a number of institutional, educational, economic and personal barriers that limit students' ability to transfer to four-year institutions. Given these realities, it is important to understand the profile and experience of low-income and first-generation community college students and to identify the financial, social, academic, and institutional factors that present barriers to successful transfer.

ECONOMIC OBSTACLES AND BARRIERS

Economic or financial hardship is one of the key factors impacting low-income and first-generation college students, forcing many to forgo the pursuit of a four-year degree. The Advisory Committee on Student Financial Assistance (ACSEFA, 2006; 2008) found that low-income community college students are half as likely to successfully transfer and earn a bachelor's degree as their higher-income peers. While tuition at community colleges is significantly lower than at four-year institutions, many community college students struggle to pay for books, child care, housing, meals, medical care, and transportation (Cochrane & Shireman; Geckeler et al., 2008; Bailey et al., 2004). Additionally, 50 percent of students work full-time and attend school part-time, which decreases their eligibility for financial aid, and lowers their persistence and retention rates (ACSEFA, 2008; Cochrane & Shireman, 2008). Personal and financial emergencies, often intertwined in students' lives, lead to unanticipated expenses that cause students to leave school (Cochrane & Shireman, 2008; Geckeler et al., 2008). Finally, low-income and first-generation community college students are often dissuaded by tuition and fees at four-year institutions, which are nearly three times the amount of those at two-year institutions (ACSEFA, 2008).

A significant decrease in state funding – currently at its lowest mark ever throughout the country – has further exacerbated the financial challenges that many community colleges confront. State cuts often lead institutions to increase tuition in order to compensate for needed resources (Wellman, 2002). Despite continued decreases in state funding, Texas is one of the few states to establish a financial aid program specifically for transfer students (Wellman). However, without sufficient resources, it is still difficult for community colleges to provide the necessary services, courses, and advising to students to enable them to successfully transfer to four-year institutions, without sufficient resources (Bell, 2006).



Limited federal loans and grants also restrict the ability of low-income students to enroll in two-year colleges. Many community colleges do not participate in federal student loan programs (Cochrane & Shireman, 2008). Once community college students transfer to four-year institutions, they are often limited by the fact that financial aid offices primarily target first-year, first-time, incoming freshmen (ACCSFA, 2008). And, given the fact that many community college students begin their postsecondary study with developmental coursework (see “Academic and Institutional barriers,” below), which they must complete before beginning the transfer curriculum, those who do transfer face the pressure of completing their undergraduate degrees before their financial aid eligibility lapses. On the other hand, many community college students are ineligible for financial aid because they must work full-time to support themselves and their families.

CULTURAL AND PERSONAL BARRIERS

In addition to financial barriers, low-income and first-generation college students face a number of cultural and personal obstacles that prevent successful transfer. They often lack the social or cultural capital (i.e. networks, family ties, community or business connections, resources etc.) that would provide information about and access to the coursework, programs, services, and resources that open the path to higher education. Those resources would also help students manage and maneuver through the bureaucracy of higher education institutions (Dowd et al., 2006). And, finally, low-income and first-generation college students lack familiarity with and knowledge of the campus environment, culture, norms and academic expectations (Tym, McMillion, Barone, & Webster, 2004).

Nontraditional-aged college students face additional familial and financial responsibilities outside the classroom, including caring for dependents and working full-time (and therefore, being forced to attend school part-time) (Dougherty & Kienzl, 2006). In this sense, community college students are often labeled as “place-bound” in that they cannot leave the immediate geographic area to attend a four-year university due to a lack of financial resources and obligations to family (Shields, 2004).

Thus, be it because of a lack of access to a university-bound curriculum, lack of familiarity with the culture, standards, and expectations of the university, or familial and financial responsibilities and obligations, low-income and first-generation college students confront a series of obstacles and barriers as they seek to complete the transfer curriculum and later, as they transfer to a four-year institution. Once at the university, they are confronted with an unfamiliar environment where they must learn the culture, expectations, and language of the academy in order to persist to graduation.

I I

ACADEMIC AND INSTITUTIONAL BARRIERS

Due to pervasive educational inequalities in the K-12 system, low-income and first-generation college students who attend community colleges are most often not competitive for admission to traditional four-year institutions as freshmen (Dowd, Cheslock, & Melguizo, 2007; Striplin, 1999; Tym, McMillion, Barone, & Webster, 2004). Upon entering the community college, they are placed into developmental and remedial coursework. Over half (about 60 percent) of recent high school graduates who enter community colleges take at least one developmental course (Bailey, Jenkins & Leinbach, 2005; Dougherty, 1994; 2003; Schwartz & Jenkins, 2007). Though “intended to meet the needs of students who initially do not have the skills, experience or orientation necessary to perform at a level that the institutions or instructors recognize as ‘regular’ for those students” (Grubb & Associates, 1999, p. 174), developmental education can, and often does, become one of the barriers to transfer (Bailey, 2009; Bettinger & Long, 2005; Calcagno & Long, 2008; Martorell & McFarlin, 2007).

Another institutional barrier is the lack of collaboration and communication between two- and four-year institutions. Those institutions that do not clearly articulate transfer requirements, curriculum, course and credit requirements, programs, standards, and expectations further the problem of low transfer rates for community college students (Kazis, 2006). Without such clear agreements, community college students often take non-transferable courses, do not complete major requirements, may end up having to repeat courses at the four-year institution, and subsequently spend more time and money

in completing a bachelor's degree (*Matthews, 2008*). In addition, private four-year institutions in particular may be less likely to accept transfer students who, unlike first-time freshmen, do not affect the graduation rates or entrance exam scores which count towards an institution's ranking (*Matthews*).

EFFECTIVE PRACTICES

Given the economic, personal and cultural, academic and institutional barriers that community college students face, institutions look to strategies that can have a positive impact on increasing the transfer rates of low-income and first-generation college students to the university. Policies and programs such as statewide articulation agreements, student success courses, institutional leadership, developmental education initiatives, learning communities and institutional financial aid have all shown to be effective.

ARTICULATION AGREEMENTS

State legislators are currently making efforts to improve communication between community colleges and four-year state institutions (*Wellman, 2002*). Institutional articulation agreements, or "the process by which one institution matches its courses or requirements to coursework completed at another institution" (*Anderson, Alfonso, & Sun, 2006*) help assure students that the courses they complete will meet transfer and major requirements, and will not have to be repeated at the institution to which they are transferring (*Wellman, 2002*).

Much of the research has posited that statewide articulation agreements between two-year and four-year institutions increase the possibility of transfer for students (*Banks, 1994; Barry & Barry, 1992; Ignash & Townsend, 2000, 2001; Kintzer & Wattenbarger, 1985; Melguizo & Dowd, 2009; Wellman, 2002*). While recent research has challenged this proposition (*Anderson, Sun, and Alfonso, 2006; Gross and Goldhaber, 2009*), it is difficult to generalize results because state articulation agreements vary greatly and the findings may reflect differences in state policies rather than the effects of policies on students (*Gross & Goldhaber, 2009*). Furthermore, these recent studies only examine statewide articulation agreements, rather than those at the institution level – many of which not only guarantee transfer of credit, but also steer students towards a specific academic pathway and offer financial incentives for transfer and completion.

STUDENT SUCCESS COURSES

Many community colleges now offer freshman student success seminars to help first-year students better acclimate to the postsecondary environment. These courses

typically orient students to aspects of college, such as program planning, study skills, writing, note-taking, financial aid, support services, and graduation requirements (*Derby & Smith, 204; Karp, O'Gara, & Hughes, 2008; Zeidenberg, Jenkins, & Calcagno, 2007*). Research suggests that these courses contribute positively to student outcomes, including completion and transfer (*Bender, 1997; Bruno, 1990; Cuseo, 1997; Karp, O'Gara, & Hughes; Raymond & Napoli, 1998; Rice & Coll, 1991; Zeidenberg, Jenkins, & Calcagno, 2007*).

EFFECTIVE INSTITUTIONAL LEADERSHIP

Institutional leadership is a key factor in the development of a campus-wide culture that emphasizes student potential for success and transfer. A campus leadership that focuses on student retention and outcomes, including transfer, can positively affect the transfer rates of students into four-year institutions. In a recent study of six community colleges, the three colleges most successful at increasing retention and transfer rates, or "high-impact colleges," not only had leaders who were committed to increasing student outcomes (through establishing retention and transfer committees, increased research on student outcomes, and creation of student success services programs) but also were committed to taking steps to improve the gaps in educational achievement levels of African American and Hispanic students (*Jenkins, 2006*). In addition, these three high-impact colleges actively recruited minority staff and faculty, promoted campus-wide dialogue on diversity, and supported specialized retention programs (e.g. TRIO programs, workshops, mentoring, and advising) for low-income, first-generation, and ethnic minority students.

DEVELOPMENTAL EDUCATION INITIATIVES

Recent studies on the effects of developmental education on student success show mixed results, since those who need developmental coursework tend to have lower retention rates (*Bailey, 2009; Bettinger & Long, 2005; Calcagno & Long, 2008; Martorell & McFarlin, 2007*). There is, though, some evidence that initiatives such as a holistic approach to developmental coursework coupled with support services is effective (*Schwartz & Jenkins, 2007*). Additionally, approaches such as providing developmental coursework within the context of real-world situations or topics relatable to students, providing opportunities for the development of analytical and critical thinking skills and collaborative teamwork, and integrating technology into coursework and assignments can improve success (*Levin & Koski, 1998*).

HOLISTIC ADVISING

Several studies have found that holistic advising approaches (academic, peer, and personal) have positive effects on low-income and first-generation students, as well as for students with disabilities. Such programs have been shown to increase academic success, retention, transfer and graduation rates (*Jenkins, 2006; Pascarella & Terenzini, 2005; Stage & Dannells, 2000*). These programs provide one-on-one career and academic advising sessions, community mentors in the students' area of interest, community and leadership enrichment opportunities, and assistance with preparing transfer applications. Some utilize a web of academic, career, personal, and employment supports through multi-office collaboration (*Kiker, 2008*). Advisors are important not only to offer academic support, but also to act as institutional "transfer agents" who assist students in navigating "the institutional culture of higher education" (*Pak et al., 2006, page 3*). As such, they help students feel part of the campus community and direct them towards transfer to a four-year institution.

Intrusive advising, whereby students are mandated to meet with advisors on a regular basis, is especially effective for this population of transfer students (*Bernhardt, 1997*). An intrusive advising program where faculty advised academically underperforming students, helped with student orientations, taught a section of college orientation, mentored 10 students each, and participated in an Early Academic Warning System was found to increase retention rates of participants (*Clark, 1995*).

LEARNING COMMUNITIES

Learning communities are of particular significance in developing a sense of academic community for students who most often do not feel a link to the institution. They engage students both in and out of the classroom, with other students, with faculty, and with campus life. Learning communities are especially important in community colleges, where the classroom may be the only opportunity to engage students with the broader life of the institution (*Bailey et al., 2004; Tinto, 1997*). Learning communities link a cohort of students together in paired courses, so that they are better integrated both academically and socially. Much recent research suggests that learning communities provide a more engaging and stimulating atmosphere than traditional courses and create more opportunities for increased intellectual interaction and shared inquiry (*Bailey et al.; Knight, 2002; Tinto & Love, 1995; Tinto, 1997*). They have shown particularly significant effects on community college campuses, where positive outcomes included increased levels of engagement as well as course completion and a higher GPA (*Bloom, 2005; Scrivener et al., 2008; Tinto, 1997*).

Honors programs are often very much like learning communities in that students take certain courses together as part of a cohort. However, unlike most learning communities, they often have academic criteria such as a minimum GPA requirement, that restrict the number of participants. Many honors programs include special services and incentives such as internships, honors-only courses, separate advising and orientation, priority course registration, and preferential admissions treatment when transferring to a four-year institution. Students who participate in honors programs show: increased interaction with faculty; exposure to a more rigorous curriculum; increased opportunities to engage in a variety of learning experiences; enhancement of students' self-esteem; and greater access to four-year institutions, baccalaureate degrees and scholarships to prestigious colleges (*Floyd and Holloway, 2006*).

INSTITUTIONAL FINANCIAL AID

To alleviate some of the financial barriers imposed on low-income students, ACSFA has recommended that institutions shift the proportion of student financial aid from merit-based to need-based aid, and limit tuition increases, thereby reducing a reliance on loans (ACSFA, 2006). Given that students most frequently need money for housing, transportation, books, childcare, and other necessities, many community colleges have set up emergency financial aid funds for students with more immediate need (*Geckler et al., 2008*).

SUMMARY

Community college students face a mix of economic, personal, cultural, academic, institutional and systemic factors that impede on their ability to successfully complete the necessary coursework to transfer to a four-year institution. A number of promising practices have been identified in the literature to help ease these students through the pipeline: clear articulation agreements with four-year institutions, effective leadership, holistic advising, and the development of learning communities. Further research can help identify additional programmatic and structural improvements to be implemented on both the institutional and state level (*Kazis, 2006*). But, at the very least, more efficient and accurate dissemination of information will help inform and prepare community college students for the transfer process (*Geckler et al., 2008*). By developing and providing baseline information about institutions' transfer policies and performance, both four- and two-year institutions, policymakers, and state officials can all better understand and improve transfer policies and effectiveness.



FINDINGS

Based on our analysis of the qualitative data collected through interviews and focus groups during our site visits, we have identified several common factors that may contribute to the successful transfer rates at the institutions we studied. These factors fit into three categories: 1) A Structured Academic Pathway, 2) A Student-Centered Culture, and 3) A Culturally-Sensitive Leadership. Some factors, such as the “family environment” of the campus (or the campus climate and culture), the role of caring, culturally-sensitive and committed faculty and staff, and the importance of community involvement, are not articulated as formal institutional policies. But these factors were nonetheless clearly evident on each of the campuses we visited, beginning with the administrative leadership and running throughout the institution. Other practices, such as making degree plans, transfer requirements and application deadlines easily accessible, and alerting students when attendance, grades, or coursework fall behind, can easily serve as “promising practice” models to institutions nationwide.

Although we set out to collect information about programs and policies specifically related to the transfer of low-income, first-generation students, in many cases we obtained information about more general success strategies. Interview respondents repeatedly noted that what works for all students on community college campuses (the majority of whom are economically disadvantaged) works for low-income, first-generation students in particular. And what works for retaining students in community colleges, also works for transferring them to four-year institutions. Transfer is simply not possible without first retaining a student and helping them matriculate through their two-year coursework. Where possible, we collected information about transfer-specific practices and those targeting low-income, first-generation students. However, we have also included in our findings more general practices that were widely cited as factors in successful transfer.

Finally, it should be noted that institutional resources need not be a barrier towards implementing the practices we have identified. In fact, many programs and policies cited in our findings are implemented at low or no cost to institutions. In some cases, institutions are able to offer services to students by developing relationships with school districts and organizations in the community. Some programs, such as volunteer faculty tutoring, simply require an interest in and emphasis on student needs. The student-centered culture we illustrate breeds a sense of motivation and innovation in campus leaders, faculty and staff, which allows institutions to transcend the limitations of financial resources. We describe in detail the components of identified programs and policies below.

STRUCTURED ACADEMIC PATHWAY

While the colleges offer a range of academic, vocational and workforce programs, each campus maintains high expectations about their students’ ability to transfer. The presidents we met with emphasized the academic mission of their institution and the importance of academic standards and rigor as an essential component of the transfer pipeline. Each has infused the notion and importance of transfer into their campus culture.

The president at Laredo Community College (LCC) stressed that the college is devoted “first and foremost... to providing the best learning environment.” At Northeast Texas Community College (NTCC), the president describes the college as an “ironic marriage” of cultures, striving to be “an exceptional college academically in a rural anti-intellectual environment.” Victoria “prides itself on the rigor of academic programs,” which helps make up the identity of the college and the community. One president described the philosophy of his campus as “I want more for you.” For example, if a student enters the college with aspirations limited to clerical work, the staff and faculty ask the student to think about next steps



beyond the certificate. Students are encouraged to enroll in core coursework no matter their career interests, thus putting them on a transfer path so they will be transfer-ready and on track to enroll in a four-year institution.

These successful community colleges *expect* students to transfer. They provide students with degree plans regardless of whether they *plan* to transfer initially. For example, many students will start out in a technical or certificate program but then decide to stay on to obtain a business degree. They can do this more easily when the colleges incorporate academic transfer courses into vocational programs and provide them with a feasible pathway outlined in a detailed, tailored plan. In addition, many of the colleges encourage students to stay on and finish the required coursework to obtain an associate's degree before transferring. This way, students can take pride in a sense of accomplishment at having finished a two-year degree.

The colleges actively pursue relationships with both school districts and four-year institutions, building a seamless transition through the educational pipeline. In addition, community colleges are cognizant of the academic deficiencies that are so common among entering students, and continually innovate and find new ways to make developmental coursework more feasible. The colleges we visited are also shifting their focus from lectures to active group learning to better engage students. These are all effective elements, described in the sections that follow, which together help create a structured academic pathway.

INSTITUTIONAL ARTICULATION AGREEMENTS

The community colleges we visited have institutional articulation agreements with nearby four-year institutions to get students on a transfer track towards a four-year degree in a specific subject area, beginning their first year of enrollment. The colleges develop tailored degree plans that students can continually refer to in order to make sure they are taking the coursework they need to transfer into their major.

Students typically complete a two-year core of general education and pre-major requirements at the community college, and then take required electives specific to their major at the four-year institution. In some cases, students can complete an entire bachelor's program without leav-

ing the community college campus. This is especially ideal when students work or have families and cannot commute or relocate.

While the state of Texas has a common course numbering system that assures transfer of core coursework from community colleges to any four-year institution within the state, institutional articulation agreements are often specific to program areas or majors. For example:

- » *NTCC has an agreement with Texas A&M Commerce whereby students are automatically admitted into the Industrial Engineering program as a junior if they meet general admission requirements, complete lower-division science and mathematics courses, and maintain a cumulative GPA of at least 2.0.*
- » *A partnership between Trinity Valley Community College (TVCC) and Texas A&M Commerce allows students to transfer up to 85 credit hours towards a Bachelor's of Applied Arts and Science degree. Students then only need to complete 36 hours on the four-year campus.*
- » *LCC's Future Teachers Program, in partnership with Texas A&M International University (TAMIU), ensures that students in the program register for classes that tie into the education major at TAMIU.*

Partnering four-year institutions sometimes offer scholarships to students on track to transfer from the community colleges. In some cases, partnering institutions work with outside organizations to offer transfer scholarships to community college students interested in specific subjects. Examples of scholarships – and other types of financial incentives – offered to transfer students as part of articulation agreements follow:

- » *Texas A&M TexArkana offers a full scholarship to Pell-eligible NTCC students who transfer. This transfer scholarship is contingent on the student finishing the core coursework at the community college before transferring to the receiving institution.*
- » *The National Science Foundation (NSF) Computer Science, Engineering and Math Scholarships (CSEMS) grant offers scholarships through University of Texas at Arlington (UTA) to Tarrant County College-Southeast Campus (TCCSE) students in Science, Technology, Engineering and Math (STEM) fields. At Southwest Texas Junior College (SWTJC), high-achieving students in the math and sciences are eligible for STEM grants at the University of Texas.*

- » UT Dallas offers the “Comet Connection” program through many of the community colleges, which allows students to lock in current tuition rates at the time of application.
- » Sam Houston State University, in an articulation agreement with Victoria College (VC), offers students at the community college a reduced application fee and use of their advisors.
- » Students in LCC’s Future Teachers Program with TAMU are provided with laptops.

Articulation agreements also help simplify the application process for financial aid at the four-year institutions. If students participate in an articulation program and know which four-year institution they will be attending, they can list both the community college and university’s codes on the FAFSA to avoid having to complete the application a second time.

It is important that community college staff make information about articulation agreements readily available to students (and to prospective students throughout the community) through outreach, advising, and orientations. Partnerships with four-year institutions help disseminate transfer information, for example:

- » Community colleges often house recruiters from four-year institutions on site. The recruiters maintain regular office hours so they can provide students with information, build relationships with them, and keep students motivated and on track.
- » Community colleges often hold transfer fairs on their campuses. University representatives provide information to community college students on campus and answer questions about degree plan and transfer requirements.
- » Several of the colleges we visited also offer degree guide manuals that allow students to review with their advisors not only planned coursework at the community college level, but also what required courses they will need to take after transferring.
- » Partnering two- and four-year institutions provide reciprocal professional development and information sessions to counseling and advising staff at the respective institutions. Universities will, for example, offer workshops to inform community college counselors of any updated course requirements for specific degree programs. Counselors can then relay that information to their students.

Articulation agreements are often developed by faculty and department chairs to meet the needs and interests of their specific disciplines. The community college faculty at these schools with high transfer rates expressed pride in the level of academic preparation and the subsequent bachelor-level coursework they prepare their students to

undertake. They maintain a collegial rapport and expectation with faculty in their academic disciplines at the four-year institution partners.

DUAL ENROLLMENT

Dual Enrollment programs – obtaining college credit while in high school – are heavily emphasized at the Texas community colleges in this study. Students typically graduate from high school with twelve college credits, although they may take up to two courses each semester for a total of 24 possible credits. In some rare cases, it may be possible that students actually graduate from the community college upon completing high school, by taking courses in the summer. Dual enrollment helps make students aware of the value of community college coursework and its role in the pathway to a four-year degree.

The state is driving this movement towards early enrollment in college coursework. Since mandating that high school students have the opportunity to obtain at least twelve college credit hours in 2007, the number of dual credit sections has nearly doubled at some colleges. Community colleges are seeing increased demand for these programs. As one administrator noted, it used to be that high school teachers encouraged their students to enroll in Advanced Placement rather than dual credit, but that “has turned 180 degrees.”

Dual enrollment programs are effective not only in the exposure to college coursework, but also at introducing students to the college campus environment. This early exposure can be critical in helping low income and first-generation students make a comfortable transition to college. Students can see that college is a real possibility, and they become familiar with navigating various services at the college, such as advising and financial aid. As one official noted, college is then “not a strange unknown” for students whose parents did not have the opportunity to attend college.

Courses are taught by faculty from the college and often mix high school students together with college students in class. One student found that with dual credit she “actually got to experience a college class” whereas with AP one “can just test out.” As one faculty member noted, receiving a “real grade in a real [college] class” in itself was a “big family event” which “boosted their spirits” and made them “more likely to continue.”

Colleges emphasize relationships with the independent school districts (ISDs) to help develop dual enrollment agreements. Many have assigned dual credit coordinators to work with area high schools. School districts often help to cover tuition and textbooks, and, in most cases, students do not pay any tuition, but only minimal fees.

The colleges are innovative in making dual enrollment courses convenient to low-income students. Many provide transportation when students cannot afford to travel to the college campus. TCCSE offers courses during the academic year in modular, portable classrooms and at UT Arlington during a short Wintermester, because neither the college nor the high schools have sufficient space. Trinity Valley Community College (TVCC) offers an interactive television option, and SWTJC offers dual credit through teleconferencing. These arrangements help to make college coursework a real possibility for students who might otherwise choose an alternative path following high school.

DEVELOPMENTAL COURSEWORK INITIATIVES

Each of the colleges we visited uses innovative practices in developmental education. They are continuously examining, redesigning, and improving their course offerings. They are particularly concerned with making the format, structure, and content of developmental coursework more accessible and effective. These innovative practices help to increase the number of students enrolling in and completing a transfer-bound curriculum.

For many students, the need for developmental coursework is a major stumbling block on the path towards transfer. The Texas Success Initiative (TSI) mandates that students be tested in reading, writing, and math skills prior to enrolling in college, and, depending on their test scores, students must complete developmental coursework prior to enrolling in certain transferable academic classes. However, in order for institutions to be included in state formula funding, the state limits the number of developmental course credits that students can take to 27 hours. Within the federal context, Pell grant recipients are limited to 30 hours of developmental coursework. Therefore, the need to address remedial deficiencies is critical not only to students' academic success, but also to their financial standing.

The percentage of first-time students needing developmental coursework at the colleges we visited ranges from 50-70%. Math is a particularly large stumbling block for students, since many have not taken math coursework for more than one year, although the state is pushing for a four-year math requirement in high school. Many faculty noted, however, that the actual deficiencies are compounded by the stigma of developmental math. Students are either apprehensive of math or think of developmental as “dummy math.” For many, math is a foreign concept. As one student at TVCC noted, she “didn’t even know what algebra was,” and wondered “why are they putting letters in math.” She overcame her initial fears after receiving encouragement from tutors and is “even excited” about math now. As one administrator noted,

the math barrier is often more a cultural than intellectual factor, and there is a need for a “cultural incubator” for math on campus.

To address these concerns, colleges are integrating developmental skills into various coursework and programs, breaking down courses into modules and building in extra academic support for developmental students. Many are beginning to offer intensive courses that combine the traditional two to three levels of each subject into one semester.

The following are all recent examples of developmental initiatives on the campuses we visited. Although these are newly implemented programs that do not yet have data available on student outcomes, they nonetheless show that institutions are innovative in formulating strategies to help students overcome a major stumbling block on their path to transfer.

- » *TVCC has an initiative in place to increase reading and writing levels within the context of non-developmental coursework. The college identified introductory courses with high failure rates, and tracks the reading deficiencies of students in those courses, who are then referred to additional academic support.*
- » *TVCC recently piloted a summer intensive class, whereby developmental courses are coupled with the Learning Frameworks class (see “First-Year Orientation/Seminar”) and students can complete the entire developmental sequence of either reading or math in ten weeks.*
- » *LCC offers a “fast track” option in developmental English and Reading, whereby students can combine the last two levels of a subject into one semester through a daily course. LCC also developed a math lab through a Title V grant, in which faculty provide one hour per week of tutoring. They based this idea on IPASS, the campus-wide faculty volunteer tutoring program (see “Additional Support Programs”).*
- » *TCCSE recently developed modular developmental math, which allows students to learn the material they need in six weeks rather than sixteen. Instructors use a Multiple Intelligence approach, whereby they assess and address specific student learning styles. They develop their own textbooks, which are available to students online free of charge.*
- » *VC is currently pilot-testing a new module-based course which combines all three levels of developmental math into one semester. The course begins with an assessment to identify specific deficiencies. Students then learn the material in customized modules rather than using a textbook. Since the course is fast-paced, instructors and support staff provide individual tutoring twice a week to each student.*

DEVELOPMENTAL SUPPORT

Developmental coursework is often supplemented by required academic support. For example:

- » At VC, students in developmental coursework are required to take tutoring, either on a one-on-one basis or in small groups. In addition, any student who is deficient in two of the three core areas is required to take *Strategies for Success*, a nontransferable one-credit course that teaches basic time management and study skills. Faculty members receive professional development over the summer, which was developed through Title V funds, to train for the course. VC recently moved developmental courses from their respective academic departments to the relatively new Division of Academic Foundations, which also houses the *Strategies for Success* course.
- » Developmental courses at TVCC have two hours of lab built in to each course.
- » SWTJC and LCC require a one-credit nontransferable student success course, for all students in remediation.
- » TCCSE developmental instructors track specific learning outcomes and refer students to the labs to work on any problem areas.

ACTIVE LEARNING

Faculty at each of the colleges are recognizing the importance of engaging students in the classroom beyond traditional lecture techniques in peer group activities. The emphasis is on teaching students how to think analytically and collaborate, rather than simply preparing them to pass an exam.

Collaborative learning aids in completion and transfer not only by demonstrating the material to students, but also by facilitating social integration. Students get to know one another through classroom activities. They can relate to each other's personal and academic barriers that often affect their involvement and performance in class. If students need to miss class due to work or family demands, peers from their group activities can help catch them up on materials.

Some specific examples of active learning include:

- » Courses at TVCC use creative means to communicate information to students. In *Introduction to Sociology*, for example, the instructor created an exercise based on the Monopoly board game to teach students about social stratification. Faculty often take their classes to the Student Success Center and the library to learn how to conduct research. Classes are also experimenting with alternative means of assessment such as group testing, portfolios and journals.

- » SWTJC is encouraging instructors to incorporate small group activities in the class to supplement lectures, and has asked teachers who have taught a class for ten years or more to start with a fresh approach in their curriculum. Basing class activities on real-world scenarios helps to contextualize material, which makes it more relatable. For example, a business professor shares real institutional data with students, so they can learn about characteristics of the local population and economy.
- » *Introduction to Sociology* at TCCSE consists of only one hour of instruction and two hours of research in preparation for a final group presentation. In programs such as construction management and engineering, students work on real-life case-studies and exchange ideas and potential solutions to a problem.

STUDENT-CENTERED CULTURE

Each of the institutions has developed a culture of personal attention, and student, or customer, focus, emphasizing service, collaboration, and innovation. This is evidenced through the importance given to and reliance on support programs such as TRIO, advising and tutoring, the focus on engagement through meaningful activities, the flexible hours of program and service scheduling, the providing of college skills seminars and the emphasis on transfer.

CUSTOMER SERVICE FOCUS

From our interviews at the six community colleges, we captured a comprehensive portrait of the people who have an active stake in the success of the primary “customer” on their campuses, the students. We heard the business language identifying students as “customers” often, with an emphasis on “high-touch” student engagement. This is deliberate and sets the tone for how to approach, support, retain and graduate their students transfer-ready.

A customer service focus is engrained at all levels, from the classroom to maintaining the grounds. As one official at LCC noted, the mindset that you “have to believe in your product” is important. From the time that students set foot in the admissions office, an emphasis is placed on “treating them with dignity.”

The colleges realize that something as simple as students having to wait in a registration line for thirty minutes could cause them to leave. Those incidents “raise flags,” and the colleges are small enough to “focus in on and correct those problems.” One college intentionally hired a new financial aid director with a corporate customer service background, because it is so important for students to be treated like customers. At another college, one faculty member regularly emails customer service tips to staff on campus.

Most of the campus' staff, faculty and administrators have open door policies, and students feel they can always approach them, and even the president. At SWTJC, the president "investigates when students say they weren't treated right" by a faculty or staff member. He has an open door policy for students and has engrained that policy among both staff and faculty. He does not want students to have to deal with layers of bureaucracy to be heard. Faculty or staff who do not adhere to that aspect of the campus culture either "stick out or leave." He specifically looks for that openness and willingness to interact with students when interviewing prospective staff and administrators.

In addition to making staff available to students on an informal basis, campuses hold regular open forums to provide students with the opportunity to express concerns. SWTJC holds forums where students can make presentations to deans. TCCSE holds monthly forums where students have the opportunity to voice concerns to the president, department chairs, and faculty, either in person or through written feedback.

CAMPUS-WIDE STUDENT FOCUS AWARENESS

Strategic investment in the human capital that interfaces daily with students is at the foundation of the success of the campuses we visited. During our interviews we observed varying approaches in working with the same target, the students. The stakeholders fall into six distinct categories: campus leaders (presidents and board members), faculty, administrators, program directors, staff, and the students themselves. Each group we interviewed looked on the college transfer process from their particular vantage point. However, key to the success of the campuses was that each stakeholder was aware of the others' involvement in supporting students. In other words, they did not operate in a vacuum in their efforts to support their students. Rather, it was a comprehensive, campus-wide effort. Ultimately, we received a multi-dimensional view of the transfer process and the people who engaged the process.

ONE-ON-ONE EMPHASIS

Each of the six colleges demonstrated a close-knit culture in which staff, faculty, and students know each other by name and are always willing to help point students in the right direction if they do not have the answer themselves. We heard many staff and faculty refer to their campus environment as a "family" atmosphere.

This type of environment stems partly from the small sizes of the campuses and the classes. The average class sizes are typically 20-25 students. Most classes are often capped at 30 and rarely reach beyond 50 for core introductory courses. Courses that include labs are typically limited to 20 or fewer.

Without lowering academic standards, faculty are aware of and make every attempt to work around students' personal circumstances. They pay attention to when students need personal or academic support. They provide students with their contact information, and refer students to counseling or learning labs as necessary.

MEETING SPACE

These community colleges we visited all had central locations for students to congregate and socialize. Student unions, lounges, and cafeterias provide space for students to form study groups, socialize, or study in between classes. This is important because if students were to go home in the middle of the day for lunch, it's possible they "wouldn't come back." Having designated meeting space during the day between classes helps to create a campus feel and connection to the college.

ONE-STOP SHOPS

The colleges attempt to make services such as registration and financial aid user-friendly by placing them together in one central location. VC removed physical barriers such as a tall customer service counter and replaced it with desks that made the interaction between students and staff more accessible and personal. Moreover, it established a "College Central" office to provide all services that students might need in a welcoming and student-friendly atmosphere. At both SWTJC and TCCSE, these critical services are all found at the entrance, which makes it very easy for students to get help.

The colleges are improving access to key registration and advising information online. Most have been upgrading their technology infrastructure and provide online portals, through which students can easily gain access to important information, such as registration status, grades, faculty contact information, and financial aid deadlines. At TCCSE, the portal makes early alert systems easier by sending automatic emails to students and their counselors based on grades and attendance. LCC recently overhauled its information systems and upgraded to a portal system that provides more automated information.

DEDICATION

Another commonality we found is the dedication of staff and faculty, for whom it seemed more common than not to have been at the college for 30 years, or even longer. It is also typical for staff or faculty to be alumni of the college, or to have family currently enrolled at the college. As the president of SWTJC said, all staff and faculty are "here for students no matter what their position on campus."

We heard one example of a faculty member who drives 50 miles every day to a campus along the Mexico border rather than teach at the branch closer to her home, because she is so attached to the students there. As one staff member noted, “faculty get really tied with communities and students,” and students recognize this dedication. A student at TVCC said that when she “makes it,” she will donate first to the college because she “sees what they do,” and “knows they’re not here for money but have the students’ interests at heart.”

One administrator at SWTJC noted that faculty and staff have “pride to work here,” because it is the “best place to work in the whole area”—not just in terms of pay. In fact, the experience is a “semi-religious call for some.” They “feel like they’re doing something important to help the population for generations to come.”

MULTIPLE ROLES/DEPARTMENTAL COLLABORATION

The staff and faculty we met with are invested in the college and its students. We saw ample evidence of staff and faculty helping out wherever and whenever possible, often taking on multiple roles. For example, deans at one college help to register students. TRIO staff and faculty often help out at registration as well, and faculty seemed to know where to refer students when they needed additional help. Some staff and faculty have been known to contact financial aid officers on their students’ behalf and even help cover their costs personally.

Faculty and staff also collaborate together across departments and programs. At LCC, one staff member referred to this practice as the “three c’s: communication, coordination, and collaboration.” For example:

- » *Weekly deans meetings at LCC bring together both instructors and student support staff, to make them aware of the issues on both sides. This way they can collaborate and take corrective action if, for example, a student is in the wrong degree plan. The president will also call meetings between various academic and vocational programs.*
- » *A Campus Assembly at LCC consisting of ten teams (including students, faculty, and staff) meets once a month to assign an issue for the teams to explore and provide their recommendations. One issue that the teams explored, for example, was the rising costs of textbooks and why some faculty included textbooks on their syllabi that students did not use over the course of the semester. These meetings are open to all staff.*

INNOVATION

The colleges often work with minimal funding and must creatively pool together resources across departments, services, or programs to meet students’ needs. These campuses have a “whatever it takes” attitude and will not let any obstacles get in the way of implementing programs and initiatives, regardless of resources. One administrator has the attitude that “we can always do more,” even when current practices have already proven to be effective.

Campus leaders go out of their way to make options like dual credit and articulation agreements more viable. The president at TCCSE “pushes thinking outside the box.” When the college did not have enough space to house high school students in the dual credit program after a big spike in enrollment, it began providing dual credit coursework through portable TCC “college centers” at the high schools, and partnered with the school district to provide buses to one of its technology centers.

TCCSE also developed a “Degree by Degree” program, whereby staff who have not completed college are encouraged to obtain their degrees on campus. The college provides staff in the program with advising, counseling, and social support. Approximately 50-60 staff members currently participate. The president created the program in 1999 by offering staff courses towards their Associate’s degrees that they could take on Friday afternoons. The college pays for two courses per year for staff, and credit by experience is also available. The “secret” to the program is the support of the president, who attends each meeting and allows staff to miss work in order to continue their educations.

Faculty are innovative as well. They stay abreast of the course and program offerings of nearby universities and keep track of workforce trends in and needs of the local community. They regularly propose new courses that will be of interest to students, and that will contribute to the local economy. Recently introduced nursing programs are in especially high demand at the colleges we visited, some with waitlists to enroll, due to job openings in that field.

Faculty also take the initiative to address the needs of low-income, first-generation students through supplemental academic support. At LCC, instructors volunteer one hour per week to provide tutoring through the Instructors Promoting Academic Student Success (IPASS) program. At VC, an adjunct faculty member developed a grant-funded program to pay students to read books. The program has been “incredibly successful” and now, “students are loving reading.”

Another way that colleges innovate is through classroom technology. Online offerings are convenient to students who cannot travel to campus, or who have competing priorities of work and families. However, many students feel that online coursework not only lacks the in-person relationships of the classroom, but also takes more self-discipline. The colleges in this study have therefore been recently experimenting with alternative hybrid solutions such as interactive video, half-lecture/half-online coursework, and lectures captured through video recordings.

TEACHING EMPHASIS

Community colleges “do not put faculty under the gun to publish or perish.” Rather, the emphasis is on teaching, and the colleges support faculty through professional development and travel opportunities “to share best practices with each other.”

NTCC developed a part-time academy for faculty and staff from all campuses, who meet once a month over the year, as well as an annual learning day in the Fall, at which faculty discuss innovative teaching ideas with each other. TVCC also has a learning day for faculty, as well as a monthly learning academy, both of which promote discussion and sharing of new ideas and methods of instruction. TCCSE holds separate professional development days for staff and faculty once each semester, with workshops, speakers and breakout sessions.

The president at Laredo stressed that the college is devoted “first and foremost... to providing the best learning environment.” Faculty have had a “long time commitment to academic rigor and concern for a liberal arts vision.” They do not feel above teaching; on the contrary teaching is at the core of their jobs and reflective of their dedication to students.

PERSONAL INVOLVEMENT

Colleges keep track of and take an interest in students both academically and personally. Developing relationships with students is important not only at the college but also in the tight-knit communities we visited, where staff and faculty often see students in town. At NTCC, the “entire campus” including the president makes phone calls to students who have not yet re-enrolled for their second semester. At LCC, the college will call students if they don’t respond to an invitation to an awards ceremony, simply because it is important for them to attend.

Faculty make efforts to mentor students, showcase their work in academic competitions, and write letters of recommendation to help them move on to four-year institutions. Many faculty stay in touch with students after they graduate through online tools such as Facebook. TRIO programs provide another example of the personal support and attention both common to these institutions and essential to keeping students in the transfer pipeline.

TRIO

Five of the six institutions we visited have federally-funded TRIO programs that support low-income and first-generation students. These programs were recognized and cited by the leadership as a major factor in the institutions’ successful transfer rates. In fact, the colleges often model campus-wide programs and services based on components of SSS. For example, SWTJC has replicated the campus SSS model for Supplemental Instruction into developmental coursework. SWTJC has also implemented a customized tracking software throughout campus, originally used by SSS, which monitors specific student service usage and outcomes. The leadership at VC is so supportive of its SSS program (the “KEY Center”), that it based its transfer center on the SSS model of providing resources and advice.

TRIO Upward Bound (UB) provides critical early exposure to college coursework and services for low-income, first-generation students in the high schools. Services provided during the academic year include mandatory tutoring, intrusive advising, career exploration, cultural activities and financial aid nights for students and parents. UB summer programs promote postsecondary education by providing exposure to community college coursework, advising, and housing. This helps students become familiar with college life and learn about the path to four-year institutions. Participants also get first-hand knowledge of the transfer process by meeting with alumni of the UB program who have since obtained baccalaureate degrees.

SSS

TRIO Student Support Services (SSS) provides academic and personal support to low-income, first-generation students on the college campus. At a minimum, the programs we visited provide participants with peer and professional tutoring, study skills workshops, and campus visits to universities that typically include presentations from admissions, financial aid, and TRIO programs. For some students, these university visits make them aware of colleges they might have otherwise never considered. In addition, students learn where to go for help once they transfer.

SSS also provides a gathering place where students can meet and study. The staff often provide meals and organize holiday celebrations. One student at TVCC referred to SSS as a “godsend,” because she was “out in the water” by herself. SSS “made a really easy transition.” Participants “make life long friends” with both students and staff through the program. Even after students have transferred, they can still come back to SSS for help.

SSS services specific to the colleges are described below:

- » *SSS at SWTJC provides Supplemental Instruction (SI) for four courses with high Drop/Fail/Withdrawal (DFW) rates (College Algebra, Chemistry, Psychology, and English). Students who have already successfully completed (defined as having received an A or B) these introductory courses serve as SI leaders. They are paid \$8 per hour to sit in on the class and hold 2-3 hour-long tutoring sessions per week. This way, they know what is being covered in class and are able to address students' specific questions and concerns. Sometimes they may receive extra credit, as well, depending on the instructor.*
- » *SSS at VC, known as the "KEY Center," provides two hours of individual tutoring per course, study skills modules, peer tutoring and personal counseling. The study skills modules are based on assessment scores, and the director administers post-tests to measure readiness for the Texas Higher Education Assessment (THEA). KEY Center staff meet with students three times per semester. During the first meeting, they discuss past experiences and goals. In the second meeting, staff review students' midterm grades and assess their need for additional tutoring. In the final session, staff and students meet to review grades and revisit the original goals defined at the first meeting. Students greatly appreciate the tutoring they receive and many eventually become tutors. One student, who took a pay cut from waitressing to become a tutor, said it was the "best decision" and "more rewarding;" she "loves helping other students."*

TRIO staff are sensitive to the needs of low-income and first-generation students. Students at TVCC described the SSS staff as "upbeat" and "encouraging." They go out of their way to support students, academically, personally and financially. SSS staff at TVCC have been known to personally cover meals and health-related expenses that students cannot afford. They also invite students into their homes for dinner, often with faculty to give them an opportunity to interact and engage academically outside the classroom. Students stay in touch with staff after transferring or graduating, by sending cards and visiting the campus.

SPECIALIZED ADVISING

Professional advisors, faculty members, support program counselors, and staff help students think about and develop long term academic goals. In addition, they make students aware of financial aid and financial planning, availability of scholarships, and college application procedures, requirements, and deadlines. Several of the colleges have transfer centers and full-time transfer coordinators, who regularly schedule representatives from partnering universities to provide students with transfer-specific information. Early-alert programs, which are particularly important in monitoring student attendance and performance, are key initiatives that help identify the many competing factors that could delay or inhibit the student from transfer opportunities.

Examples of required advising include:

- » *At LCC, one-on-one advisor sessions are required for each incoming freshman before they can register. Advisors review transfer guides with students and help to ensure that classes are transferable. LCC holds a degree plan week the first two weeks of each semester for undecided students, to "keep them focused" and "minimize their probability of losing credit hours" and financial aid. To ensure that students don't take courses outside their major or degree plan, LCC recently increased the minimum number of credit hours—from nine to 30—that students must complete before being eligible for self-advising. In addition, faculty and advisors at LCC have an open door policy; students do not need to make an appointment and are "never turned away." In addition to eight advisors on staff, each faculty member serves as an advisor as well. Students can train to become Student Advocates to help provide registration and financial aid advising.*
- » *SWTJC conducts "arena registration," where all staff—including deans—advise or enroll students in some capacity as part of an "institution-wide effort." This gives students the opportunity to meet with faculty whose classes they have not taken. Freshmen are required to meet with counselors following registration to discuss transfer and career plans.*
- » *While registration at NTCC has moved online, restrictions are placed on some students who require in-person advising. Students who place into developmental coursework, for example, must meet with advisors in order to register.*

- » TCCSE requires group advising for new students. Sessions provide information about coursework and strategies for student success, such as the number of hours students should enroll in if they work. By the end of their first semester, students are required to form a degree plan. TCCSE has four counselors, four academic advisors, and part-time academic advisors. Counselors provide both personal and academic help and hold workshops for academic and study skills.

TRANSFER ADVISING

Transfer advising is typically a part of regular academic advising. Counselors and faculty are trained not to let students enroll in courses unless those courses will help them transfer. In addition, advisors try to monitor any changes to credit hour requirements at the four-year institutions in the state to make sure the core coursework stays aligned and is easily transferrable.

In some cases, institutions do provide separate transfer advising – specific examples follow:

- » VC has a transfer center that provides information about specific transfer requirements at various universities, visits from university personnel, and counseling regarding transfer pathways and opportunities.
- » TVCC has a dedicated transfer coordinator who communicates critical transfer information to students. The transfer coordinator also arranges campus visits to area universities, where students can meet with representatives from admissions, financial aid, and departments of interest. In addition, TVCC hosts a College Day on campus with four to five universities once or twice each semester. This provides an opportunity for students to ask university representatives questions about transfer requirements and life at the four-year universities.
- » TCCSE has office space for a recruiter from UTA who regularly visits the campus each week to advise students. TCCSE is planning to open a transfer center to bring in additional university representatives.

EARLY ALERT

Early alert programs identify students who need additional academic support based on their grades and attendance before the midterm. Through early alert systems, colleges “try not to let students get lost in the system” and keep them on the transfer track. For example:

- » A mandatory early alert system at LCC refers students who are not participating or in danger of not passing to meet with a member of the Advising Center at least twice during the semester. Advisors identify and work through underlying problems, such as work hours or other responsibilities that may be impacting student performance. Students identified by the early alert system are also referred to the Learning Center for tutoring. The Advising Center at LCC also follows up with students who withdraw.
- » Students at SWTJC whose GPA falls below a certain level are assigned individual advisors or counselors, who then closely track their GPA. In addition, those who have not passed at least two assessment exam sections are required to meet with advising prior to registration. A new attendance reporting policy at SWTJC requires faculty to report attendance twice a semester for these students.
- » Faculty members at TVCC provide midterm reports that assess students both in terms of attendance and grades. Students in danger of not passing are referred to advising, tutoring, or other help. In some cases, faculty will take students to financial aid so they can find out how failing would affect their Pell grant status, if they are recipients.
- » Students in developmental coursework at TVCC are on an early alert system and receive a warning if they miss a week’s worth of classes (developmental attendance is mandatory). After that initial warning, if students miss three weeks of classes, they will be dropped from the class. (There is an appeal process available for students.) It is optional for faculty to provide a second warning.

In addition to these early alert programs which monitor progress of students early on to prevent them from dropping out, some campuses have implemented programs for students once they are already on academic suspension. TCCSE introduced a successful Academic Recovery initiative which blocks students on suspension from registering until they come in for a holistic assessment by an advisor. They are then monitored throughout the semester. At TVCC, students with a GPA below 2.0 must appear before the admissions committee prior to registering for the next semester. The committee recommends the number of hours in which they should enroll and any prerequisites needed, and then monitors these students throughout the semester. These programs help assure that students pace themselves and do not get off course from their degree plans.

The colleges monitor not only students who are at-risk of dropping out, but also those who are close to completion. TVCC contacts students who reach 45 hours to make clear the steps needed to complete their degrees. In many cases, students who are ready to transfer only need nine credits to obtain an associates degree. The college also encourages students who successfully obtain certificates to take the additional credits necessary to reach an associate's degree. Once students have completed graduation forms, the registrar checks to make sure they are enrolled in the required courses, and if they are not they are referred to their counselors. If the only course they need to graduate is full, an exception will be made. TVCC has increased the number of graduation ceremonies, and holds them in the summer and winter in addition to the spring, to help make graduation feasible as part of this emphasis on completion.

FINANCIAL AID ADVISING

Financial aid staff at the community colleges work closely with financial aid offices at the partnering four-year institutions to keep track of financial aid and scholarship requirements and deadlines. They work with students to ensure that financial aid transfers from two- to four-year institutions. Since community colleges are open-door institutions that offer flexibility and often, exceptions to deadlines based on personal circumstances, it is important to help students understand the seriousness of earlier and often more rigid deadlines at four-year universities.

Financial aid staff conduct audits, and explain which courses students can or cannot take in order to graduate with minimal loans. They make sure that students are not maximizing loans for frivolous expenses and keep students mindful of the fact that if they transfer to a university, they will likely accrue more debt because of the higher tuition at four-year institutions. Advisors often discourage students from working full-time not only to help them succeed academically, but also to ensure that they don't make too much money to qualify for a Pell grant.

Not all of the colleges we visited still participate in loan programs, and those who do are carefully monitoring default rates. The financial aid staff at LCC does everything they can to help students obtain work-study positions or grant-based aid rather than have them take out loans. If students default on loans, the college requires that they attend one-on-one loan counseling sessions.

LEARNING CENTERS/TUTORING LABS

The colleges provide critical academic support through both general tutoring labs and subject-specific learning centers, where students receive professional and peer tutoring, computer-assisted instruction and test preparation. The labs and facilities that host tutoring are frequently used by students and receive needed resources and recognition from leadership on campus. In some cases, for example, the Academic Center for Excellence (ACE) at SWTJC, tutoring services are patterned after those provided by SSS at the college in order to expand such support to students who are not participants in those programs.

Labs often have quiet areas for individual use, as well as designated space for group interactions. Thus the comprehensive offerings in these tutoring centers provide low-income, first-generation students with social as well as academic support. Students often use the labs on a regular basis, even daily, and develop supportive communities. Students at LCC, for example, say they "almost live" at the tutoring center; they know "there's always someone there to help," and the tutors and students know each other by name.

Some specific examples of labs or learning centers include:

- » *The Student Success Center at TVCC houses faculty and peer tutoring, as well as study space and a computer lab. This past Fall, the center received 150 students per day. The center is open in the evenings, seven days per week. Faculty often bring classes to the center to conduct research or administer testing. Faculty make an effort to incorporate the labs into class time so those with jobs do not need to spend extra time outside of class in lab. This movement from the classroom to the labs represents an overall shift from lectures to more active learning. There is also a “Counselors Corner” in the student success center with resources on various issues such as time management. The computer lab is also important for students who cannot afford their own computers; all services including printing are free.*
- » *At VC, “every full-time math instructor is committed to working in the tutoring center.” Smart Thinking, an online tutoring system, is available 24 hours per day to all students through a Title V grant. Faculty have access to transcripts of the conversations from Smart Thinking. Tutors are available not only through the tutoring center, but also through the reading, writing and math centers. The expansion of tutoring was also funded through a Title V grant.*
- » *TCCSE has several labs and learning centers in science, math, reading, writing, and other subjects, as well as a learning center catering to students with disabilities. The centers are open until 10 p.m. and on Saturdays, and are available to high school students as well. Staff in the labs form relationships with students and often provide mentoring.*
- » *ACE at SWTJC provides tutoring as well as computer-aided instruction that integrates math, reading, and writing exercises with textbook material. ACE is also responsible for administering supplemental instruction, in both introductory courses as well as some developmental education coursework. The college will soon be opening additional labs specific to math and writing.*
- » *The learning center at LCC provides tutoring to those who are identified as being academically at-risk. The president views the learning center as “key.” Students are referred to the learning center beginning in high school as dual credit students, and successful students eventually become peer tutors.*

LEARNING COMMUNITIES

Several campuses have developed programs through which students enroll as a cohort in a structured curriculum, often based on a specific theme, and participate in social activities tied to their academic coursework. These learning communities encourage student ownership of their academic experience and a campus engagement that together lead to a vision of transfer. Honors programs, while not accessible to all students due to minimum GPA requirements, are models of such cohort-based programs that can be replicated for specific populations of students.

Some examples of learning communities include:

- » *Sure Start at TCCSE is “a smaller community within the college” that serves 30-40 low-income, first-generation, and minority students who take classes together as a cohort. The program is modeled after the Honors program, but does not have a minimum grade point requirement and does not offer scholarships. Students take credit courses combined with developmental coursework, for example developmental reading coupled with human relations or government. The program is selective in choosing courses with the best faculty. On a personal level, the program provides “positive reinforcement” for students, who typically enter thinking they are not smart or capable. In addition, the program provides study skills strategies and introduces students to services such as financial aid, the Learning Center, and the Math Lab. Each year is built around a specific theme; this year’s is “I believe in me.” The program has achieved first-to-second year retention rates of up to 90 percent, and has received awards from the Texas Higher Education Coordinating Board and the American Association of Community Colleges.*
- » *TCCSE also created a program called Women in New Roles, which is a two-semester course designed to build a tight-knit community and lasting friendships among non-traditional aged, low-income and first-generation college women. Participants not only take classes together but also participate in community service activities. The goal is to help transition students into a new stage in their lives, and to get them involved in the community both on and off campus. The college would like to make a similar program available for men.*

- » *The Cornerstone honors program at TCCSE is a two-year cohort-based program for thirty selected students per year. Students enroll in nine hours of coursework specific to the program per year. The Cornerstone Course is team-taught by three professors from different disciplines. For example, the first semester course is History of Western Civilization, but it also incorporates philosophy and speech components. Another course mixes math and science with the fundamentals of philosophy. A course in sociology incorporates history and economics. Participants also take two levels of core courses, which are often linked to the interdisciplinary course through writing assignments. Participants receive a \$500 scholarship each semester if they maintain a 3.2 GPA.*
- » *The TVCC Honors program serves approximately 25 students and stresses active learning. For example, in Government class, students do not just read about elections but actually go into the community and conduct polls and analyze the data. Students in Biology have the opportunity to conduct field research, for example in fishery, and also have access to a DNA lab. The program also offers social activities, such as field trips to museum exhibits in Dallas.*

FIRST-YEAR ORIENTATION/SEMINAR

Orientation for incoming students at the community colleges we visited are typically voluntary. In some cases, the colleges hold first-year orientation seminars that go beyond typical campus tours. They add essential skills for college, including note-taking, study techniques, test-taking, and navigating campus services. These are critical skills that can prepare students to be transfer-ready and successful on the four-year campus.

Some examples of First-Year Orientation programs include:

- » *The Master Student Seminar at NTCC helps students with goal setting and provides them with study and test-taking skills as well as basic information, such as how to use the online portal to register for coursework and check financial aid and registration status.*
- » *SWTJC holds a College Success Skills class for incoming students, in place of orientation. The college recently expanded this one-hour course into a three-hour course with two hours of lab and additional tutoring.*

- » *A Student Success course for developmental students at LCC is taught by volunteer faculty. They introduce students to campus, and take them to library to learn about research concepts, and to the tutoring center to make them feel comfortable in approaching services for help. The course also provides test-taking and study skills, for example how to read a chapter effectively. Students in the course also learn about time management concepts such as understanding deadlines, dealing with interpersonal relationships while in school, and calculating their GPA. The college is currently looking to open up the course to first-time students who are not in developmental coursework.*
- » *The Learning Frameworks class in the psychology department at TVCC helps students understand and address their specific learning styles. The class is not mandatory and only a “small population” enrolls. The class emphasizes practical information such as study skills. A Biology professor who has been at TVCC for 40 years created a study skills guide, since there is no formal orientation course.*

ADDITIONAL SUPPORT PROGRAMS

The colleges we visited are innovative in creating additional support programs that further foster transfer through academic success and personal enrichment. Some examples of innovative support programs include:

- » *Through LCC’s Instructors Promoting Academic Student Success (IPASS), 90 instructors have committed to volunteer one hour per week to cover any students who don’t receive tutoring through SSS. This is especially helpful in the larger classes where faculty cannot provide as much one-on-one attention in class.*
- » *LCC offers a two-week summer bridge program in partnership with two high schools in the region for low-SES students. Students in the program receive study skills preparation and “a sense of belonging and chance to participate in higher education.”*
- » *LCC also has a Texas Higher Education Coordinating Board “G Force Mentoring” work-study grant, which is part of the College for Texans campaign, to create a college-going culture in the community. First-generation students from LCC with demonstrated financial need are paid to spend twenty hours per week mentoring students of similar backgrounds in the schools and community centers.*
- » *The Brother-to-Brother and Sister-to-Sister mentoring programs at NTCC have been shown to improve the retention of African American students. Students in the programs tutor junior high school and high school students, and participate in activities together as a cohort.*

FLEXIBLE SCHEDULING

The colleges offer coursework and academic support in the evenings and, at some campuses, on weekends. Such flexibility recognizes the fact that the students they serve juggle multiple responsibilities ranging from work to family demands. As one student at VC said, they would otherwise “have to make a choice” between work and school.

Some specific examples of flexible scheduling and other arrangements include:

- » *SWTJC now offers approximately half of its coursework during the day, and half at night, up until 10 p.m. Each day, an hour between 11 a.m. – 12 p.m. is set aside for student time, when no classes are scheduled and students can study or participate in activities. To accommodate students without transportation, SWTJC offers buses and vans to many outlying areas. SWTJC also offers daycare services through a special population state grant.*
- » *TCCSE offers coursework and counseling services in the evenings and on weekends, including developmental courses. Classes run from 7:00 a.m. until 10:30 p.m. Labs are open late at night Monday through Friday, as well. In addition, staff and faculty are “creative in finding time slots and space,” and will “find the only window available to students,” such as a Saturday morning.*
- » *NTCC offers some evening classes, and classes are on a standardized curriculum so that students can easily make up for a class they missed by taking one offered at a different time, without feeling lost. NTCC also provides buses to students from rural areas. Faculty will often arrange for tutoring sessions in the evenings in order to accommodate students’ schedules.*
- » *At LCC, tutoring is available from 8 a.m. to 9 p.m. LCC also offers daycare services to students through its child development lab.*
- » *VC recently moved to a four-day week to accommodate the majority of its students who are working. VC offers financial assistance for its childcare program.*
- » *TVCC is also moving to a four-day week and offers evening courses, especially through its satellite campus which caters more to commuter populations.*

STUDENT ENGAGEMENT IN CAMPUS LIFE

Although traditionally thought of as commuter colleges that do not offer campus life outside the classroom, all of the colleges we visited engage students in active clubs and organizations. Activities often require a minimum GPA in order to participate, which encourages participation without detracting from study time. Many colleges set aside an hour of free time each day when no classes are scheduled to encourage participation. As one student said, “if you can fit social activities into your schedule, they make classes that much more meaningful.”

Some examples of engaging campus activities include:

- » *Faculty-sponsored clubs such as the science, creative writing and arts clubs are active at VC. The college allows for students who transfer to University of Houston-Victoria to remain members so they can be active for longer than two years. The college also holds pajama parties which even the president attends, a mock presidential debate, and a Pirates alumni day.*
- » *NTCC has a total of 35 organizations including brother-to-brother/sister-to-sister mentoring, chemistry and physics clubs, Presidential Scholars, a commuter organization, and Phi Theta Kappa. The science and math clubs are active, with lectures drawing “packed rooms” and students making presentations at national competitions. Baseball, rodeo, and soccer are also popular. At the college’s annual “Scare Fair” (open to the community), student organizations set up booths and raise funds.*
- » *SWTJC has active Phi Theta Kappa (the national community college honors club) and Catholic student groups, as well as academic clubs including organizations focused on psychology, business, and pre-professional subjects (e.g., cosmetology). The Hispanic club, Mariachi and Folklorico dance clubs are also popular. Students can also sign up to be Ambassadors, working to provide information about the college to prospective students.*
- » *LCC has 30 different clubs including Phi Theta Kappa, and academic clubs such as computers and science. The vocal club holds fundraisers and takes trip to live Opera performance in Austin.*
- » *At TVCC, the Student Government Association and honors club are active, and the college holds special activities such as a campus Olympics and flag football. Students participate in community service activities such as food drives. The Dancing Squad is nationally known, and has even marched in the Macy’s Thanksgiving Day parade. The college also has an active alumni association, which organizes fundraisers and activities throughout the year.*

» *The Student Activities staff at TCCSE provides students with “everything [they] need to start an organization.” Some activities and events include leadership retreats, a Phi Theta Kappa scholarship seminar, performances, family events such as Easter egg hunts, Cinco de Mayo and poetry month. Faculty are involved in academic organizations and co-present at workshops. The college also provides opportunities for the community to participate in activities on the campus, so they can become more familiar with the college.*

CULTURALLY-SENSITIVE LEADERSHIP

Each of the presidents we met with displayed strong leadership, energy and dedication to their institutions; they are intimately involved with the students and many come from similar social, economic and racial/ethnic backgrounds. This personal knowledge of who their students are informs the presidents’ professional insights about how to best structure a campus environment that maximizes their students’ success.

Some examples of the presidents’ exemplary leadership include:

- » *The president of SWTJC is in his 41st year at the institution; he started as faculty, then was dean of students, and has been president for ten years. He “grew up real poor,” and reminds others to be sensitive to the needs of low-income students. He sometimes “gets in trouble” for helping out students financially on an individual basis, for example by handing out meal vouchers. He’ll “never forget” the help he received, and “will go out of [his] way to help others.” In addition to the president, several of the college’s board of directors are alumni.*
- » *The president at VC is seen by staff as “accessible and caring.” He makes an effort to have contact with students and hear their concerns. Before becoming president, he always thought there should be more contact with students, and now as president, makes that a priority. He also teaches economics in the summer, and holds regular “Pizza with the President” events where he asks faculty members to nominate one student each to have lunch with him. The president extends this contact to staff and faculty, with whom he holds individual meetings and open forums. He emphasizes accessibility, openness and respectfulness and expects others on campus to hold those values as well.*
- » *The president at TCCSE opened the campus in 1995 with 4,000 students and has since grown the campus to be the second largest in the district with 12,000 students. She has been with the district for nearly forty years, previously as dean of students at the Northwest campus. There, she gained recognition for developing support programs catered towards women, minorities and senior citizens. As president she orchestrated grassroots efforts to grow the campus, sending staff out into the community with flyers and registering students using laptops when the campus opened and the building was not yet complete. She continues to be creative in finding the space for classes and services to meet the growing enrollment. Several staff described the president as a “go-getter” with a tremendous amount of energy, enthusiasm, and an entrepreneurial spirit. She is “out in the community consistently,” and has “high expectations for good attitude, discipline, and diversity.”*
- » *The president at LCC expressed that he values the importance of TRIO and other supplemental academic support programs that promote student engagement. He “goes the extra mile” to help students. The board of directors is also supportive and understanding of the need for academic and personal support services for low-income, first-generation students. Of the nine board members, six are alumni or former faculty.*

STAFF AND FACULTY ROLE MODELING

Staff and faculty emphasize not only how dedicated they are to their jobs, but how much they can relate to students. Many come from low-income homes in the same surrounding towns from which they draw their students, and were the first in their families to go to college. In many cases they owe their success to staff or faculty members who reached out to them as college students. Some examples of role modeling follow:

- » *All SSS staff members at SWTJC are alumni and come from low-income backgrounds. One has disabilities and another knows sign language, so they can relate to students with a range of needs. They make an attempt to emulate the type of support they received – or wish they had received – as students. Given their backgrounds, they easily form relationships with the students. SSS staff “go way beyond their job requirements” and “make the transfer process easier.” They help students explore and plan long-term paths of interest. Students find the SSS staff to be patient, understanding, relatable, welcoming and approachable. They “make you feel special.”*

- » *A Welding instructor at NTCC originally started as a student in 1985, knowing no English. He took ESL coursework, obtained an associates degree and passed the GED in English in 1988. He then obtained a BA at Texas A&M Commerce, and became a part-time instructor in bilingual systems. He “understands students” who “don’t know where to go,” and “can tell them what to expect.” He “loves this institution,” and feels like he “was born here.” He was the first in his family to attend college, and took classes at night while he worked during the day. He understands the importance of role models and personal relationships since his success is due in part to an instructor taking an interest in him.*
- » *The Upward Bound director at NTCC originally enrolled in the college as a student to obtain a certificate, but the then-director of the library reached out and told her she could do more, so she pursued her dream of obtaining a degree in education. She tries to engrain that same belief and motivation in her students now, and her mantra is “don’t empathize; expect.”*

DIVERSITY

These colleges recognize the importance of providing students with relatable staff and faculty of similar backgrounds. At LCC, nearly 97 percent of the faculty is Hispanic, just like the student body. The president at TCCSE instituted a policy that mandated that one-half of all staff be ethnically diverse, and one-half be male, as part of a district-wide initiative to hire more diverse staff and faculty. She would like for faculty and staff to mirror the student body, and eventually would like to bring at least one Hispanic speaker to each office. The new president at VC also has a goal to increase the diversity of staff, in terms of both ethnicity and gender.

TENURE/ALUMNI

At all of the colleges we visited, it is common for staff and faculty to have been at the college their entire careers, and many are alumni of the college. At TVCC, the average length of service is twenty-two years. Staff are “not here to progress, this is where we want to be until retirement.” The focus is on “students not careers.”

In addition, many of the colleges have long traditional histories and famous alumni who are inspiring to the students. For example, Tomas Rivera graduated from SWTJC, and LCC produced a state senator and US district attorney. Students see these examples as great success stories that give them hope for their own futures.

STRATEGIC PLANNING

The colleges are beginning to pay attention to data, primarily those collected through the Community College Survey of Student Engagement (CSSE) that allow them to track indicators of engagement in the classroom. This movement is being driven partly by the statewide *Closing the Gaps* plan, which requires institutions to identify and close gaps in student success rates by 2015.

- » *SWTJC is particularly focused on accountability and data-based decision making, as a participant in Lumina Foundation’s Achieving the Dream initiative. Through that initiative, they have learned how to work with the national student clearinghouse to track longitudinal retention and graduation rates. SWTJC has been focusing a great deal on its mission, through the formation of committees and a Quality Enhancement Plan (QEP), in preparation for SACS accreditation. Through the QEP, the college developed departmental Unit Action Plans and benchmarking goals to track transfer rates, as well as measures of access, quality, and retention – rather than rapid growth. As one administrator noted, the college “picks the pockets with greatest potential” rather than “trying to move the institution in one swipe.” He likened this approach to “steering aircraft carriers,” where you “have to plan turns gradually rather than making all the changes at once from the beginning.” That way, “you don’t risk losing institutional history.”*
- » *TVCC, like SWTJC, relies on CSSE scores and its QEP, which identified the need to increase reading and engagement levels. Another major goal at TVCC is to shift from a teaching to a learning culture, which has led to the implementation of a professional development program for faculty and staff. The college has developed Learning Enhancement Annual Plans (LEAPs), whereby instructors set and track pass rate goals for their classes and identify opportunities for improvement.*
- » *The institutional mission statement at NTCC emphasizes access, affordability and quality education, and is tied to structured and measurable goals, which the college tracks on a regular basis. Some of the goals emphasize transfer, for example through increasing the number of four-year partnerships. One individual at NTCC felt that the transfer mission is “our bible,” of which they are constantly aware. The president emphasizes staff-wide involvement in institutional strategic planning.*

» TCCSE has developed key performance measures such as accountability and transfer, out of the district-wide Uniform Retention Plan. The college is currently developing an advising task force, as it has identified the need for a transfer center with specialized advisors in addition to the counseling center. Other initiatives included in the district plan incorporate student group advising and supplemental instruction.

OUTREACH

Each of the colleges emphasized the importance of community outreach, to better inform the community about financial aid availability and deadlines, college programs, courses, services, and transfer opportunities. The colleges and their communities have symbiotic relationships: While colleges benefit from increasing awareness and interest among prospective students, members of the broader community can benefit, even without enrolling, from the services and activities offered to the public on campus.

Community outreach is a deliberate attempt on the part of the colleges to develop relationships with and advocates in community organizations and schools. Staff from the colleges meet on a regular basis with counselors and principals in the schools, and are careful not to interfere with class schedules. In addition to schools, college outreach services collaborate with local businesses and churches. “Word of mouth is important” in the community, more so than advertising, and is primarily achieved through outreach programs.

Some examples of community partnerships include:

- » TCCSE has formed relationships with the city government, Chamber of Commerce, and school districts. The District covers all tuition and fees for dual credit programs so students do not have to pay. Each year, TCCSE hosts an opening event with a parade to generate pride in the community. The president speaks frequently at local events and sits on foundation boards. She encourages all staff and faculty to make a conscious effort to participate in community events. She has also formed partnerships so that rather than pay for sponsorships or membership dues, the college will provide space or services for events in exchange, for example catering from Culinary students. These “connections are important” and help to “get things done fast.” Local community organizations and school districts have become “like a family,” and it’s “easy to ask for favors.”
- » TCCSE also reaches out to partnering universities through annual luncheons and campus visits, which have involved all faculty. Counseling staff attend retreats at the partnering universities as well, which helps to expand their knowledge of the admissions process and academic programming at the partnering universities.
- » At VC, the auditorium is the “cultural center in town,” attracting parents in the community to events and acting as a recruiting tool. The college also holds summer programs for young children so that they become familiar with the campus early on. That way, “it’s not a scary place.” The counseling and recruiting departments arrange tours for students from the local schools. Students at VC participate in Boys and Girls clubs in the community to “give hope and options” to younger students.
- » SWTJC holds College Nights several times throughout the year, to make high school seniors and their parents more aware of and interested in the college. Since the college is so close to the U.S. border with Mexico, all events and materials are in both English and Spanish. Outreach staff are bilingual, and sensitive to the fact that most parents have not been to college. The college is informing students in the community about college options beginning in 5th or 6th grade, and has worked to build a relationship with the local tribal council to recruit its students.
- » TVCC holds a College Prep Day for high school seniors in the Fall, to provide information about financial aid and colleges in the area. The college also holds a Career Day in the Spring for Junior High School students.
- » The president of LCC represents the college on a local council of district and institution leaders in the community who meet monthly to work on concerns surrounding transfer that have been raised by community members. For example, the council will address why any courses might not be accepted at the four-year institutions.
- » LCC provides advisors to the high schools, and high school students visit the LCC campus for career exploration days. The college also sends a mobile “Go Center” into the communities and schools, with laptops, applications, and FAFSA information. In addition, faculty and program directors talk about the opportunities available on campus on Spanish language radio stations.

» NTCC brought 130 high school students to campus for a leadership conference, which was at no cost to the college but provided “huge exposure.” They also hosted a Future Farmers of America contest, and invited speakers from businesses in the community. One faculty member holds science “road shows” where he showcases students from NTCC and their work as a way to recruit future students.

In addition to these campus-wide efforts, specific departments from the colleges provide their own outreach activities. For example, one department chair launched an annual Criminal Justice Career Day, which brings in professionals from all over the state to discuss opportunities with students. Departments also host academic competitions, which draw future students from the surrounding communities.

These outreach activities do more than promote the accessibility of community colleges; they also help to instill in those unfamiliar with community college pathways the possibilities of transfer and career opportunities beyond the two-year degree. Additional examples follow.

COMMUNITIES IN SCHOOLS

Communities in Schools (CIS) is a nationwide dropout prevention program that has been on the NTCC campus since 1989. Staff members reach out to students starting in pre-K through the 12th grade through academic and social support. Thirty-two youth service coordinators case-manage 3,200 students in 22 schools from 11 districts, and the program serves a total of 10,000 students. CIS has several events on campus throughout the year, often in partnership with other programs such as Upward Bound.

CIS brings students to campus to learn about academic programs, and offers six core services: tutoring, referrals, cultural enrichment through field trips, health services, career guidance and social events. Program coordinators motivate students to complete SAT registrations, college applications and the FAFSA through rewards such as pizza parties. Furthermore, students have the opportunity to interact with faculty and become familiar with campus staff and services, thus making the dream of college a real possibility.

COLLEGE CONNECTIONS

Another outreach program at NTCC is College Connections, a *Closing the Gaps* initiative, through which the college provides 1,000 high school juniors and seniors – many of whom are not on the college track and initially plan to work after high school – with advising, degree planning, career assessment and financial aid assistance.

TCCSE has also implemented College Connections, which reaches out to Hispanic students specifically. The program works with high schools to find time during the school day to advise seniors and help them fill out the college’s application and the FAFSA. Students in the program are automatically accepted into the college when they graduate from high school in May.

PARENT OUTREACH

In addition to reaching students, it is equally important for the colleges to communicate information to parents, particularly those who have not attended college themselves. Outreach staff help parents understand the benefits of college in comparison with their students working directly after high school, and make parents more comfortable with the idea of their children enrolling. For example:

- » TCCSE has a program called “Ambassadors in the Community” which reaches out to parents of Hispanic youth with information about college. They also help parents understand the ease of obtaining a four-year degree through transfer pathways from the community college. In some cases, parents become interested in enrolling themselves.
- » “Smart Girls” at NTCC brings 300 sixth through eighth graders and their mothers to campus on a Saturday to meet with professional women in the sciences, and to encourage their interest in STEM fields.
- » Summer programs such as UB, which require students to stay overnight on campus, carefully communicate information to parents who are often apprehensive about “letting their kids go.” UB at NTCC holds mandatory parent meetings, and UB at SWTJC holds an orientation for parents where they are required to sign contracts to let their children live in dorms for the summer. In addition, the UB Administration and Parents Team (APT) holds activities and workshops for parents throughout the year. At a banquet at the end of the summer session, parents can learn about their child’s accomplishments.

This outreach to parents continues once their students are enrolled at community colleges. Parents are often made aware of their child's milestones, such as making the deans list, and they are included in invitations to award ceremonies and graduations. This sense of inclusiveness motivates students and parents alike to continue with postsecondary education through to the four-year degree.

FINANCIAL AID OUTREACH

Institutions also reach out to both students and parents through financial aid information sessions. A member of the financial aid staff at SWTJC noted that students are sometimes hesitant to apply for aid because they think that will bind them to the institution. Or they simply don't bother completing the FAFSA because they don't think they will qualify for aid. Financial aid offices therefore work with recruitment and outreach programs to communicate information to prospective students.

At financial aid nights at the high schools, college staff explain financial aid to students and parents. Staff walk parents through the FAFSA to show them that college can be affordable, and that a four-year degree is possible. They make sure that parents know what type of information they need to collect and track to provide on the application. Partnering senior colleges set up tables with information about scholarships. Most of the colleges also provide financial aid materials and presentations in Spanish. At TCCSE, the financial aid director makes presentations in Vietnamese to reach that population, as well.

Colleges seek additional ways of communicating financial aid information to students once they are already at the college. At LCC, student mentors are trained to provide other students with financial aid information. TCCSE provides announcements and alerts through the district-wide "Campus Cruiser," an online portal.

LOCAL SCHOLARSHIPS

Outreach efforts and community partnerships often help to fund college for low-income, first-generation students. A local scholarship at NTCC covers any remaining costs for both tuition and fees if students graduate in the top 10 percent of their class (tuition only if they do not meet that requirement). The grant is limited to two years which can be a problem when students require developmental courses. These grants are provided by Pilgrim, a local chicken plant located in the NTCC community. However the college's foundation is looking into alternative scholarship options due to the economic instability of the region.

INSTITUTIONAL AID

Institutions are sensitive not only to the cultural and ethnic backgrounds of students, but also to their financial needs. They make clear to both prospective and current students the cost advantage of starting at community colleges, which are relatively affordable compared to four-year institutions. Tuition at community colleges is as low as \$40-50 per credit hour, compared to over \$300 at the universities. Despite this relative low cost, low-income students still need financial aid to pay for their education at a community college.

The colleges work to pull every available resource together to help their students enroll in and matriculate at the institution. Several of the colleges have scholarship committees that work with local donors in the community to provide additional funding for low-income students. The alumni associations at SWTJC and VC are growing and recently raised money for scholarships.

LCC has an emergency scholarship of \$100 to assist "any student in getting their foot in the door," and some faculty and staff "have been known to finance students personally out of pocket." The Outreach Services department at NTCC has a scholarship, taken "out of the paycheck" of the Vice President of Outreach, for any student in one of their programs, to cover any remaining expenses after financial aid.

TCCSE provides \$300 bookstore vouchers for students enrolled in at least six hours of coursework. The Stars of Tomorrow need-based scholarship provides students in the county from the top 50 percent of their class with two years of tuition and book fees, to be used within six semesters. This \$50 million scholarship fund was raised through mineral rights on campus, and the college's goal is to eventually "offer [the scholarship] to anyone."

These small but impactful amounts of financial assistance are reflective of the leadership, staff and faculty on these campuses who are sensitive to the needs of low-income, first-generation students. This financial support, along with the encouragement and attention provided by support programs cited earlier, empowers students to follow through with their dreams of obtaining four-year degrees.



RECOMMENDATIONS & CONCLUSIONS

RECOMMENDATIONS

Our overarching recommendation is for community colleges to develop and implement an institutional-wide strategy to incorporate and integrate “promising practices” as discussed in the findings. The first step is a thorough discussion of existing practices and an analysis of the current institutional data on transfer. Campuses must identify and challenge any existing practices that discourage or deter the possibility of achieving structured academic pathways, student-centered cultures, and culturally sensitive leadership. The following overarching strategies provide a foundation that will help foster the development of the “promising practices” we found in the six community colleges with higher than expected transfer rates.

COLLABORATIVE CAMPUS PROGRAMMING

Each of the campuses has a strategic process to move students through a road map of transfer-preparatory coursework coupled with academic and social support systems. Rather than simply relying on dedicated individuals, the strategic process instills a culture that requires all stakeholders on the campus to collaborate and actively participate through instruction and support.

ADMINISTRATIVE OFFICES AS SUPPORT AND SERVICE CENTERS

Irrespective of the role and rank of the personnel we interviewed, when we walked into an office, we were immediately made to feel at home. Staff and faculty always assured us that if they did not have the information we needed, they would find the person who does. This is indicative of the practice they extend to students daily. The administrative staff is committed to assuring students that they are there for their welfare and not vice-versa. Students should feel that the administration is there to support the transfer process, and that information about transfer is easily accessible.

DATA-DRIVEN DECISION MAKING

One of the first steps in such strategic planning is to identify the challenges that specific students face in transfer. As the colleges collect data on students, it makes a difference how those data are used to inform decisions, establish budgetary priorities, and educate the campus community. The strategic analysis of data, which identified what kind of support their students needed at various stages in the academic pathway, helped inform the decisions that played a role in the success of the campuses we visited.

FACULTY ENGAGEMENT IN THE TRANSFER PROCESS

Faculty must be an integral part of developing a transfer culture. Their role in rethinking and redesigning both developmental and transfer-bound curricula is central to developing a transfer culture and increasing transfer rates. This culture can be further fostered through the cooperation and collaboration of faculty with the academic leadership, program directors, and support staff on campus.

REWARDING PEOPLE WHO VALUE STUDENTS

Inevitably, the people who interface with students daily are the ones influencing their decisions to transfer. This includes not only faculty and counselors but also administrators and staff. All members of the campus community need to send the clear and consistent message that they believe in the students’ potential for transfer. This is a particularly important message for low-income and first-generation college students for whom college has not always been a given. This level of student value begins with an investment in staff and faculty, both formally and informally. Those who are on the campus to simply fulfill a job do not thrive at these campuses.



PERFORMANCE AND ACCOUNTABILITY CULTURE

An important finding was that the campuses we visited were not surprised that they had been selected for us to visit. Individuals at the institutions were aware that a transfer culture existed at their college. They do not shy away from doing whatever it takes to ensure that their students succeed in their dreams of securing a college degree. All of them are willing to be innovative and take risks because, given their cultures of performance and accountability, only those efforts that work and produce the desired outcomes will be implemented and supported.

Each of the campuses we visited developed programs and policies that provide students with a clear structure and pathway for transfer. They structure their academic and social support services to make certain their students are transfer-ready. By using these recommendations as a guiding framework to adopt aspects of the practices we identified, institutions will have a means to make transfer a reality for their low-income and first-generation college students.

THE CHALLENGE OF A GOOD THING

Although the colleges we visited are clearly innovative and successful in creating programs that support low-income, first-generation students as they transition into college and, eventually, through the pipeline to four-year universities, challenges and concerns continue to exist.

One potential concern of many faculty and staff at the community colleges is that students who become used to this level of attentiveness will experience difficulty when they transfer to a larger four-year institution. Some of the colleges try to prepare their students by telling them that customer service may not be at the same level at the four-year institution and that once they transfer, they will need to be more independent. As one of our interview subjects noted, “hand-holding is an ongoing debate” because they want to nurture students but also prepare them for life beyond the community college. The president at SWTJC acknowledges that he has been criticized for “spoon-feeding” students, but he is intentional about providing help in order to build their confidence in their ability to succeed at the university level.

In some cases, students are anxious about attending a big campus where they worry that they could end up being just be “a number.” Some students who transfer to four-year institutions actually come back or call periodically to ask for advice because they have not found that same level of support at the university or because they are so reliant on the relationships they built at the community colleges.

Students who transfer to four-year institutions often feel that the staffs are not as accommodating at the university. In addition to being much larger, four-year campuses have more formal processes. Students recognize they are “spoiled” on the community college campus where they receive individualized attention and one-on-one time with faculty and staff. Many students realize they will not have the same access to faculty at four-year universities. One student, after realizing that she only had two classes left to take before transferring, took only one at a time because she didn’t want to leave.

The community colleges view the support they provide as a way to educate students to take advantage of the available resources. While the receiving four-year institutions may not have the same level of individual service, students will at least know how to seek help. In addition, community colleges help to build the foundation for those who are not “natural at being a college student.” One student likened this to “training wheels,” in other words, community colleges help until you can “stand on your own two feet.”

Once they do transfer, many students feel they can use all of the support gained on the community college campuses. Many look for programs like TRIO and are not afraid to ask for help. However, others may feel that they cannot get the same level of personal help. They feel there is “a lot thrown at them,” and are “told to go to the website and fill out forms.” The community colleges recognize that perhaps too much hand holding will not prepare the students well, and that they need to teach students to be self-sufficient.

FUTURE RESEARCH QUESTIONS

Although it is beyond the scope of data available in this study, the outcomes of transfer students once they have made the transition from community colleges to four-year institutions is worth examining. How do transfer students fare both academically and socially at the four-year institutions? Is the personalized support they receive at the community college enough to help them to be independent and succeed at the four-year institutions? Or are students who transfer from community colleges in need of further services similar to those they receive in community colleges to persist and graduate from four-year institutions? How are transfer students received at the four-year institutions to which they transfer? What programs and services should the four-year institutions provide for transfer students?

These are among many other questions that beg to be further explored as a result of the findings of this report. While the institutions included in this study exemplify elements of successful programs and practices that help to successfully graduate and transfer low-incomes and first-generation college students, it will also be important to track how these innovative and collaborative institutions continue to evolve in order to meet the needs of a changing demographic of community college students.

CONCLUSION

This study provides a framework for the development and implementation of a strategic plan of action aimed at increasing transfer rates, particularly for low-income and first-generation college students, at community colleges not only in Texas, but throughout the nation. Improving transfer rates requires a strong, culturally-sensitive leadership committed to involving all segments of the campus community – including faculty, administrators, and staff. An in-depth, data-driven discussion and analysis of current practices, and the development of a multi-faceted plan of action aimed at developing a student-centered transfer culture will together improve transfer rates.

Each of the six campuses we studied has implemented a series of different strategies in developing a transfer culture. There is a comprehensive and holistic approach that includes articulation agreements with school districts and universities; outreach to the local community; dual enrollment and early outreach programs such as Upward Bound; a focus on curricular innovation, including developmental coursework initiatives and the development of learning communities; and strong support programs, including orientation, advising, tutoring, Learning Centers, Early Alert programs, and Transfer Centers.

In closing, we want to underscore the fact that all these different strategies are marked by a fundamental belief in and commitment to students, who are at the heart of what each campus does. All through the study we have emphasized their student-centered cultures, developed and maintained by a culturally sensitive leadership, faculty and staff. Additionally, they are committed to engaging, retaining, graduating, and transferring students. In fact, all of these faculty, administrators, and staff are working to make the statewide Texas initiative, *Closing the Gaps*, a reality – and that is not just a Texas dream, but an American Dream.



APPENDIX A: QUANTITATIVE ANALYSIS

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A series of regression analyses employing both state and national data was developed to identify institutions that perform “better than expected” in preparing low-income college students in Texas two-year, public institutions for transfer to senior institutions. The state-level analysis included the most directly relevant measure—an overall senior institution transfer rate, which was accorded the most weight in the analysis. However, other related outcomes (e.g., graduation rates and graduation productivity) were used as part of a convergent methodology.

Because a direct measure of transfer among low-income and first-generation students was not available, we contextualized the results by highlighting the best performing institutions among those institutions that serve the highest proportions of students from low socioeconomic backgrounds.

The analysis employed a two-level approach:

1. *Texas state-level data, supplemented by U.S. Census Bureau data, were used to predict overall senior institution transfer rates and two other success outcomes (6-year graduation rate and the ratio of associate’s degrees to degree-seeking enrollment) among 67 public, two-year college campuses in Texas.*
2. *National data available through the U.S. Department of Education and the U.S. Census Bureau were used to predict three success outcomes (3-year graduation rate; associate’s degree completions as a percent of total awards; and associate’s degrees awarded in the liberal arts and sciences as a percentage of total associate’s degrees) among approximately 1,000 public, two-year colleges across the United States. These related outcomes were chosen because transfer rate information is not available at a national level.*

The general approach for both levels of analysis was to develop a set of regression models that would best estimate each outcome and then examine the residuals, that is, the difference between actual and predicted performance, in light of the socioeconomic profile of each campus. The results of the different outcome models within each level were then combined, with the most weighting given to the state-level model predicting the transfer outcome, that is, the outcome of most direct interest. Only the state-level results are included below, as they provided the most useful data that guided our selection of institutions for site visits.

STATE LEVEL ANALYSIS

Most of the data for the state level analysis was obtained from the Higher Education Data System of the Texas Higher Education Coordinating Board (THECB). Specifically, campus level data were extracted from the Higher Education Accountability System (www.txhighereddata.org/Interactive/Accountability/) with some additional information on special population characteristics taken from campus annual data profiles (www.txhighereddata.org/reports/performance/ctcadp/). County demographic indicators were added from U.S. Census Bureau data.

Sixty-seven community college campuses were included in the analysis, including 40 institutions that are not organized into districts, 24 campuses of multi-campus districts (e.g., the 7 campuses of Dallas County Community College District), and 3 districts that do not separately report campuses (Collin County, El Paso and Houston).



TABLE 1. Summary of Regression Modeling Results for State Level Analysis.

OUTCOME	OVERALL SIGNIFICANCE	MODEL R ²
Senior Institution Transfer Rate	F(8,57)=15.97***	.691
Six-Year Graduation Rate	F(7,58)=11.47***	.581
Ratio of Associate's Degrees to Degree-Seeking Enrollment	F(8,58)=6.35***	.467

Three campuses were excluded for different reasons. The Southwest Collegiate Institute for the Deaf (part of the Howard County Junior College District) was excluded because it serves a small, very specialized population. Northeast Lakeview College (part of the Alamo Community College District) was excluded because it did not open until 2007 and has only 98 students. The Texas Southmost College District was excluded because it is part of a merged two- and four-year institutional entity that includes the University of Texas, Brownsville.

Linear regression models were developed for each of the three outcomes (senior institution transfer rate, six-year graduation rate and associate's degrees as a percentage of total degree-seeking enrollments) by first using a stepwise approach to identify variables that contributed to the prediction of the outcome while controlling for other predictors. The models were then pared down to significant predictors. Table 1 summarizes the resulting model for each predictor, including the overall significance level of the model and the overall variance accounted for by the predictors (R²).

TABLE 2. Study Variables – State Level Analyses (N = 67 valid values)

VARIABLE	YEAR	MEAN	SD	MIN.	MAX
OUTCOMES					
Transfer Rate Overall	2007	0.16	0.05	0.00	0.33
6 Year Graduation Rate of Fall 2000 Entrants		0.11	0.03	0.00	0.20
Ratio of Associate's Degrees to Annual Enrollment	2007	0.03	0.01	0.01	0.07
ENROLLMENT CHARACTERISTIC					
Annual Headcount Total	2007	16,843	13,517	1,294	86,167
Percent Change Annual Headcount	2002-07	0.30	1.53	-0.21	12.45
Annual Academic Program Enrollment	2007	8,356	7,319	733	37,190
Pct. Change Academic Enrollment	2002-07	0.04	0.10	-0.16	0.26
Pct. Enrollment in Academic Programs	2007	0.49	0.18	0.09	0.87
Pct. Academic Fall Credit Enrollment		0.65	0.15	0.20	0.92
Pct. Change Academic Fall Credit Enrollment	2002-07	0.25	0.41	-0.30	2.13
Pct. Change Fall Credit Enrollment	2002-07	0.15	0.35	-0.11	2.73
Pct. Full-Time Enrollment	2007	0.35	0.11	0.15	0.63
Change in Pct. FT Enrollment	2002-07	-0.04	0.05	-0.15	0.09
Pct. Pell Recipients	2007	0.26	0.09	0.09	0.45
Change in Pct. Pell Recipients	2002-07	0.02	0.05	-0.13	0.12
Pct. In-District Students	2007	0.57	0.28	0.03	0.97
Pct. Out-of-District Students	2007	0.40	0.28	0.00	0.95
Pct. Out-of-State Students	2007	0.04	0.04	0.00	0.27
STUDENT PROFILE CHARACTERISTICS					
Pct. Students Age 25+	2007	0.47	0.11	0.16	0.72
Pct. Students Underrepresented Minority	2007	0.39	0.19	0.14	0.93
Pct. International Students	2007	0.01	0.02	0.00	0.07
Pct. Female Students	2007	0.56	0.07	0.21	0.67
FTE Student to FTE Faculty Ratio	2007	19.67	3.24	12.00	31.00

For each model, we generated unstandardized predicted values and standardized residuals for the outcome. The standardized residuals from the three models were combined through a weighted total, with the transfer rate residual weighted by 5, the six-year graduation rate by 2 and the ratio of associate's degrees to degree-seeking enrollments by 1. These measures were chosen at our discretion to give the most significant weight to the most direct measure of interest but to also allow results of the other two measures to have some influence without overpowering the model.

TABLE 2. (continued)

VARIABLE	YEAR	MEAN	SD	MIN.	MAX
SPECIAL POPULATION PERCENTAGES					
Academically Disadvantaged - Total	2007	0.27	0.16	0.03	0.66
Economically Disadvantaged - Total	2007	0.21	0.14	0.02	0.62
Disabilities - Total	2007	0.03	0.02	0.00	0.14
Limited English Proficiency- Total	2007	0.05	0.07	0.00	0.39
Incarcerated - Total	2007	0.01	0.04	0.00	0.19
Displaced Homemakers - Total	2007	0.02	0.02	0.00	0.11
Single Parents - Total	2007	0.06	0.04	0.00	0.17
In at least one special pop. group - Total	2007	0.44	0.16	0.11	0.74
Academically Disadvantaged - Academic	2007	0.32	0.16	0.03	0.70
Economically Disadvantaged - Academic	2007	0.23	0.16	0.01	0.73
Disabilities - Academic	2007	0.03	0.03	0.00	0.15
Limited English Proficiency- Academic	2007	0.05	0.09	0.00	0.51
Incarcerated - Academic	2007	0.01	0.04	0.00	0.23
Displaced Homemakers - Academic	2007	0.02	0.02	0.00	0.08
Single Parents - Academic	2007	0.05	0.04	0.00	0.16
In at least one special pop. group - Academic	2007	0.48	0.17	0.10	0.89
FACULTY CHARACTERISTICS					
Pct. Full-Time faculty	2007	0.41	0.13	0.20	0.78
Change in Pct. of FT Faculty	2002-07	0.02	0.10	-0.16	0.42
Pct. Female Faculty	2007	0.53	0.05	0.40	0.66
Pct. Underrep Minority Faculty	2007	0.17	0.15	0.01	0.73
COUNTY DEMOGRAPHICS					
Pct. of adults 25+ with high school diploma/GED	2000	75.44	6.72	50.50	91.80
Pct. of adults 25+ with bachelor's degree or higher	2000	20.89	7.05	11.10	47.30
Pct. of Population in poverty	2004	16.21	3.90	5.50	30.50
Pct. of population ages 15-34	2005	28.93	2.11	24.59	38.44
Pct. of population who are white, non-Hispanic	2005	83.89	8.46	70.98	98.01
Pct. of population who are Hispanic	2005	31.49	19.54	4.40	94.95
Population male-female ratio	2005	99.37	8.11	91.58	154.14
Per-capita income/\$1,000	2005	31,806	4,065	16,359	45,720
Unemployment rate	2006	4.89	.65	3.34	7.36
Percent K-12 underrepresented minority	2004-05	.055	.20	0.13	0.98
Percent K-12 white, non-Hispanic	2004-05	.43	.21	0.01	0.86
Percent K-12 free/reduced price lunch	2004-05	.51	.10	0.18	.72
K-12 total number of students	2004-05	191,693	246,786	677	734,133
K-12 H.S. graduates	2004-05	10,208	12,505	46	35,714

To accommodate the interest by the Pell Institute in exploring campuses that prepared low-income and first-generation students for transfer, we focused on socioeconomic status indicators that include both economic and educational attainment indicators, albeit not a direct measure of first-generation college going rates. For the state-level analysis we employed two measures to determine the socioeconomic level of the student population: a socioeconomic (SES) scale for the county in which the school is located (derived from a set of U.S. Census Bureau statistics as explained more fully in the next section) and the percent of the student population deemed to be economically disadvantaged as reported to the Texas Higher Education Coordinating Board. The two measures, which were correlated at $r=0.36$, were then combined into a single indicator by first standardizing them for the 67 campuses (i.e., calculating a standardized value as the scale value minus the sample mean divided by the sample standard deviation), and then averaging them.

Variables included in the analysis are displayed in Table 2, and predictor coefficients are shown in Table 3 on the following page.

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TABLE 3. Stepwise Regression Coefficients for Predictive State-level Models²

	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS		
	B	STD. ERROR	BETA	T	SIG.
A. DEPENDENT VARIABLE: SENIOR INSTITUTION TRANSFER RATE					
Variable (Constant)	2.008	2.468	.813	.419	
Pct. Full-Time Enrollment 2007	.255	.046	.501	5.556	.000
Pct. Academic Fall Credit Enrollment	.138	.029	.382	4.717	.000
Pct. Change Annual Headcount, 2002-07	-.040	.008	-1.117	-5.144	.000
Pct. Spec. Pop. - Limited English Proficiency- Academic	.147	.054	.233	2.711	.009
Pct. Spec. Pop. - Incarcerated - Academic	-.333	.094	-.264	-3.531	.001
Pct. Change Fall Credit Enrollment 2002-07	.164	.037	1.065	4.462	.000
Pct. Pell Recipients 2007	-.152	.053	-.247	-2.867	.006
Pct. Change Academic Fall Credit Enrollment 2002-07	-.055	.015	-.421	-3.769	.000
B. DEPENDENT VARIABLE: SIX-YEAR GRADUATION RATE					
Variable (Constant)	11.360	1.605	7.076	.000	
2000 % bach or more 25+	-.240	.044	-.482	-5.398	.000
Pct. Change Annual Headcount, 2002-07	-.005	.002	-.223	-2.516	.015
Pct. Out-of-State Students	-.315	.084	-.325	-3.729	.000
Pct. Students Age 25 plus	.128	.029	.394	4.393	.000
Pct. Spec. Pop. - Single Parents - Academic	-.252	.075	-.306	-3.369	.001
Pct. Spec. Pop. - Disabilities - Total	.324	.137	.208	2.356	.022
Pct. Change Academic Enrollment 2002-07	.072	.033	.197	2.192	.032
C. DEPENDENT VARIABLE: RATIO OF ASSOCIATE'S DEGREES TO DEGREE-SEEKING ENROLLMENT					
Variable (Constant)	3.180	1.983	1.604	.114	
Annual Headcount Total 2007	-3.559 E-5	.000	-.392	-3.504	.001
Pct. Out-of-District Students	.012	.005	.263	2.130	.037
Pct. Spec. Pop. - Economically Disadvantaged - Total	.033	.009	.385	3.723	.000
Pct. Spec. Pop. - Disabilities - Total	-.169	.054	-.309	-3.145	.003
Pct. Spec. Pop. - Limited English Proficiency- Total	-.033	.017	-.201	-1.968	.054
Pct. Spec. Pop. - Incarcerated - Total	.086	.032	.312	2.725	.008
2005 pct of pop ages 15-34	.305	.095	.522	3.199	.002
2005 male-female ratio	-.088	.025	-.582	-3.506	.001

² Given the use of step-wise regression for the purpose of prediction only, we caution against the interpretation of the coefficient as is customary in explanatory research.

APPENDIX B

STAFF & FACULTY INTERVIEW GUIDE

INTRODUCTION

We identified your college as having higher than predicted transfer and performance rates based on institutional and student characteristics – using both state and national data from the Texas Higher Education Coordinating Board and the U.S. Census.

We are now undergoing the qualitative portion of this study, to gain further insight into what programs and practices your institution has implemented to facilitate its high success rates.

Please note that when we ask you questions about transfer we are interested in the institution as a whole but also would like to focus in particular on low-income, first-generation and disadvantaged students.

ALL STAFF/FACULTY

1. What student or institutional factors do you think account for the institution's current transfer performance, particularly of low-income, first-generation students?
 - » i.e. unique student characteristics, support programs or academic intervention, transfer counseling or advising, tutoring or mentoring, institutional policies, proximity of receiving institutions, instructional approaches such as learning communities or supplemental instruction, special student services or campus climate, efforts of receiving institution(s), recruitment policies, scheduling flexibility, class size/ratio, full-time faculty, extracurricular activities, funding per FTE
2. Are there any institution-wide goals or policies that affect transfer rates?
 - » For example, the institutional mission, any transfer/retention committees or strategic plans, or required coursetaking to facilitate transfer?
3. Are any incentives in place that encourage transfer? Does the college receive resources or recognition based on its transfer rate (or its retention or completion rates)?

4. Do you think any challenges exist to producing even higher rates of retention and transfer? What, in your view, are the limits of institutional responsibility for student retention, transfer and graduation?
5. Can you think of any "stories" of extraordinary institutional or faculty effort to help ensure the success of low-income students?

ADMINISTRATORS OF TRANSFER-RELATED POLICIES (ADMISSIONS, ACADEMIC AFFAIRS, ETC.)

6. What is the actual process for transferring to an in-state four-year institution (formal application? transcripts? etc.)
 - » Who is eligible to transfer? What courses, number of credits, level of performance, etc. are needed to transfer from this college to a public four-year college in the state? Are there any non-academic requirements for transfer?
 - » Are students likely to transfer to private or out-of-state four-year institutions, and if so what are the requirements?
7. Does the institution operate under any transfer rules or articulation agreements other than statewide policies?
 - » For example, does completion of any two-year program at the institution ensure that a student can transfer to a (public in-state) four-year college? Or do only specific majors or programs ensure transfer?
 - » For transfer-eligible programs, do all college-level credits transfer with a student or only certain credits?
 - » Can students transfer prior to completing a program, and if so, is there any minimum number of earned college credits for transfer?
 - » Do any formal transfer or joint enrollment agreements exist with specific institutions? Does the college provide developmental classes for students at any 4-year institutions? Is this community college considered a "branch" of any local four-year college?



8. To which institutions do most students transfer? Are there transfer-oriented policies and services at **receiving institutions** that may help account for higher than typical transfer rates? Do recruiters from these colleges visit the community college regularly?

9. How, and to what extent, is transfer **presented and encouraged** in students' initial and ongoing contacts with the institution? (application, orientation, freshman experience courses, advising, etc.)

10. Does the institution offer specific "**transfer services**" or an office charged with facilitating transfer?

11. What types of **academic support** and reinforcements are available at the institution?

- » Any writing centers, tutoring, supplemental instruction, early alert system, attendance monitoring, intrusive advising?

12. What does a **typical freshman academic program** look like? What courses are required or taken by large percentages of students? What is a typical course load?

- » How likely are students to move to sophomore status at the end of the first year of full-time enrollment?
- » Is distance education a major factor at the institution?

13. Do any opportunities for **social integration** exist beyond the classroom? What are the programs, who does each one serve, and approximately how many students take advantage? What do you think is the impact of social support programs?

- » i.e. ethnic groups, mentoring clubs, sports, residential programs, etc.
- » support programs such as TRIO/MESA that provide a "home base" and link students to campus
- » Does the campus make any accommodations for students who are also parents? Working? Have a disability? What services are available to help these students? Typically, how much of the curriculum is offered during the day? Evening? Weekends?
- » Are there programs that allow students to move together as a cohort, such as a weekend program?

RECRUITMENT & ADMISSIONS

14. What **enrollment goals** have been set by the institution? What is the institution's "target" student, if any? Please describe the typical characteristics of local students.

- » What efforts have been made, if any, to attract low-income, first-generation, underrepresented and nontraditional-aged students? What was the outcome?
- » How do these efforts fit within overall recruitment efforts (e.g., share of budget, staff attention to these populations)?

FINANCIAL AID

15. Please describe institutional policies for **need-based aid**.

- » What is the typical mix of grant/loan aid for a low income freshman student and how much of "need" is likely to be covered?
- » What other sources of assistance may be available? How much work/study assistance is available?
- » What efforts have been made to integrate financial aid policies with transfer policies? For example, planning for meeting educational costs once students have transferred, continued access to grant aid? Do financial aid offices of community college and receiving institutions work together in any way?
- » What are your views with respect to adequacy of aid, role of aid policies in promoting transfer?

ACADEMIC AFFAIRS/ DEANS/FACULTY/ADVISING

16. Please describe the structure of **developmental/remedial education** at the institution and the sequence of developmental courses.

- » *How does the institution determine who enrolls in developmental education and for what period of time?*
- » *Are students required to enroll in developmental courses prior to other coursetaking, and how strongly are sequencing requirements enforced?*
- » *What percentage of new students enrolls in developmental classes in math? In English?*
- » *What is the “progression” out of developmental education—i.e., how long do students typically take these classes and what percentage of those who take developmental courses complete the sequence and enroll in credit courses?*
- » *Is completion of the developmental sequence sufficient to perform adequately in the first freshman credit-bearing course in the same subject?*
- » *What evidence is there about the impact of the institution’s approach to developmental education on retention, transfer or completion?*

17. Please describe the **advising process** for new freshmen and continuing students

- » *Who advises students about which courses to take?*
- » *When does advising take place? When are students advised to declare majors?*
- » *Is admission to some majors restricted, and if so, how?*
- » *What are the policies with respect to dropping courses? How commonly do students drop courses?*
- » *At what GPA level is any action taken, and what actions are taken? How common are such actions?*
- » *Does the college have an early alert or warning system to alert advisors when students are having academic difficulty?*
- » *What evidence is there on the impact of the advising process on continuation, transfer or completion?*

18. What, if anything, does the institution do to “**structure**” **the first year** at the institution? Please describe any special programs, such as a pre-freshman “bridge” program, freshman seminars or college success courses, learning communities, “home base” or affinity groups, educational opportunity programs, study groups, other.
- » *Who is likely to be encouraged to enroll in special programs?*
 - » *What is the evidence of impact on retention, transfer or completion? To what extent is encouraging transfer a focus of special programs?*

INSTITUTIONAL RESEARCH

19. Please describe your institution using data from institutional profiles, IPEDS data, institutional studies, fact books, etc.—size, student body characteristics, full/part time enrollment rates, main academic programs, main transfer programs, organization of college, faculty, etc. (whatever you think is critical).

20. What are institutional **transfer rates**? How are those rate data obtained?

- » *Do you have information on transfer rates by other student characteristics (gender, age, race/ethnicity, program or major, entering academic performance, etc.)*
- » *Do you have any historical trends on transfer rates?*

Thank you very much for your time, we appreciate your feedback. Please be assured that your responses will remain anonymous.



APPENDIX C

STUDENT INTERVIEW GUIDE

INTRODUCTION

We would like to learn more about your experiences here at the college, and whether or not you are planning to transfer to a four-year institution, and why. For those of you who already have transferred, we would like to find out what influenced your decision, and how the process has been in terms of credit transfer and other transitional factors. We will be asking you a series of questions about your experiences and how the staff, faculty and services offered here affected your decisions.

1. First, we would like to begin by collecting some basic information from you – your age, enrollment status (full or part-time), program or major, educational goals, and the number of college-level credits completed.
2. How long have you been enrolled at this institution? Was this the first college you attended?
» *For those who already transferred: where are you currently enrolled? Was this the first four-year college you attended?*
3. What were your educational goals when you entered this college? Have they changed? If yes, how? Why have they changed?
4. Did anyone here, or any experience here, influence you in changing educational goals? What impact did a change have on coursetaking, number of transferable credits, other?

5. If transfer is a goal: what level/type of institution are you planning to attend? If you selected a specific institution, how?
» *For those who already transferred: how did you select your current institution?*
6. How do you know/find out whether courses you take are transferable?
7. What is your current situation in terms of accumulating the credits needed to transfer or graduate?
8. What is the process for transfer? Who do you seek out or where do you go to get help with information on your status or on the transfer process?
» *For those who already transferred: what was good about the process? What could be improved?*
9. Who (family, institutional officials, teachers, friends, etc.) encouraged you in pursuing your education? In planning to transfer?
10. How likely do you think it is that you will transfer in the next year or two?
» *For those who already transferred, how satisfied are you with your choice? Are you considering changing institutions in the future?*

Thank you very much for your time, we appreciate your feedback. Please be assured that your responses will remain anonymous.

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APPENDIX E

INSTITUTIONAL PROFILE MATRIX

INSTITUTION	NO. OF CAMPUSES	MAIN CAMPUS LOCALE	IN-STATE TUITION & FEES (2007-08)	SIZE (FALL 2008 ENROLLMENT)	% MINORITY	% FEMALE	% OVER 24	% PART- TIME	% FED. GRANTS
Northeast Texas Community College	6	remote town	\$2,118	1,010	28%	53%	17%	59%	63%
Laredo Community College	2	mid-size city	\$2,766	7,831	98%	58%	32%	62%	72%
Southwest Texas Junior College	4	rural	\$2,335	4,716	85%	59%	30%	59%	70%
Tarrant Community College - Southeast	5	suburb of large city	\$1,512	IPEDS data unavailable for single district campus					
Trinity Valley Community College	4	small town	\$1,650	5,046	16%	67%	34%	56%	48%
The Victoria College	2	small city	\$1,970	4,002	40%	66%	33%	67%	35%

Source: National Center for Education Statistics IPEDS Fall 2008 Enrollment Survey



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ABOUT THE COUNCIL

Established in 1981, the Council for Opportunity in Education is a non-profit organization dedicated to expanding educational opportunity throughout the United States, the Caribbean, and the Pacific Islands. Through its numerous membership services, the Council works in conjunction with colleges, universities, and agencies that host federally-funded college access programs to specifically help low-income, first-generation students and those with disabilities enter college and graduate.

The mission of the Council is to advance and defend the ideal of equal educational opportunity in postsecondary education. The Council's focus is assuring that the least advantaged segments of the American population have a realistic chance to enter and graduate from a postsecondary institution.

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